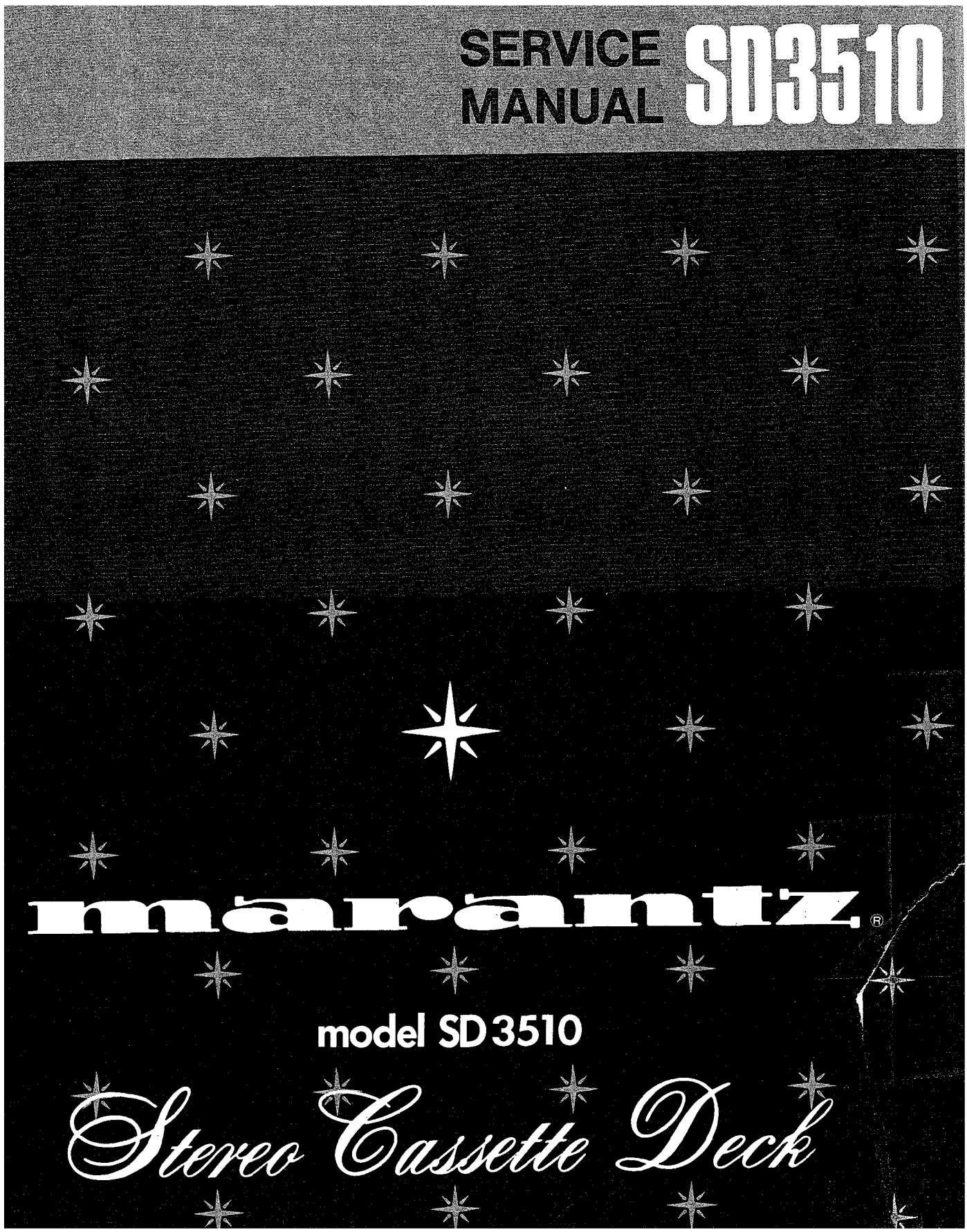
SERVICE MANUAL SD3510



marantz®

model SD3510

Stereo Cassette Deck

MARANTZ DESIGN AND SERVICE

Using superior design and selected high grade components, MARANTZ Company has created the ultimate in stereo sound. Only original MARANTZ parts can insure that your MARANTZ product will continue to perform to the specifications for which it is famous.

Parts for your MARANTZ stereo are generally available within 72 hours throughout the nation via a toll-free line to our National Parts Depot in California. The sales professionals who take your call immediately refer to their own desk top computer terminal and can quickly determine the availability and price information you require. If, for some reason, your order should exceed our available stock, we usually can instantly provide an alternate replacement part or current delivery information. When the order is placed and confirmed, the computer simultaneously generates "hard copy" orders at the distribution center. As hard copies come directly from the computer to the national parts depot, your requested stock is assembled and prepared for shipment and placed on the first available carrier for delivery to you.

ORDERING PARTS

Phone orders will eliminate mail delays, and we encourage the use of this method. If you order by mail, use MARANTZ parts order forms which are available from our National Parts Depot located at the following address:

SUPERSCOPE NATIONAL PARTS DEPARTMENT
20525 Nordhoff Street
Chatsworth, California 91311
Phone: 1-800-423-5108
1-213-998-9333

The following information must be supplied to eliminate delays in processing your order:

1. Complete address.
2. Complete part numbers.
3. Complete description of parts.
4. Model number for which part is required (indicate MARANTZ).
5. Account number (for account customers only).

Direct consumers will be provided with the current retail price quotation on available parts in order to advise them of the cost of the parts and shipping.

OVERSEAS PARTS ORDERING

Parts may also be ordered from the following overseas addresses:

U.S.A.
Marantz Company, Inc.
National Service Dept.
P.O. Box 577
Chatsworth, CA 91311
U.S.A.

CANADA
Superscope Canada, Ltd.
3710 Nashua Drive
Mississauga
Ontario, Canada L4V1M5

AUSTRALIA
Marantz Australia
32 Cross Street
Brookvale, NSW 2100
Australia

JAPAN
Marantz Japan, Inc.
3622 Kamitsuruma
Sagamihara-shi
Kanagawa, Japan

EUROPE

Marantz Europe S.A.
326 Avenue Louise Bte 32
1050 Brussels
Belgium

Marantz France
4 rue Bernard Palissy
92600 Asnieres
France

Marantz Audio U.K., Ltd.
193 London Road
Staines, Middlesex
United Kingdom

Marantz Germany GMBH
Max-Planck-Strasse 22
6072 Dreieich
West Germany

Belgium
Auguste Van Zande
Brussels
n

Marantz Svenska A.B.
Franzengatan 6
10425 Stockholm
Sweden

Marantz Norske A.S.
Refstadalleen 13
Oslo 5
Norway

the above locations are fully equipped to take care of your total service needs. Because various countries have differing uration requirements, it is necessary that you contact the service facility in your particular country. In the event that s no service location listed for your country, please contact the nearest facility for the necessary assistance.

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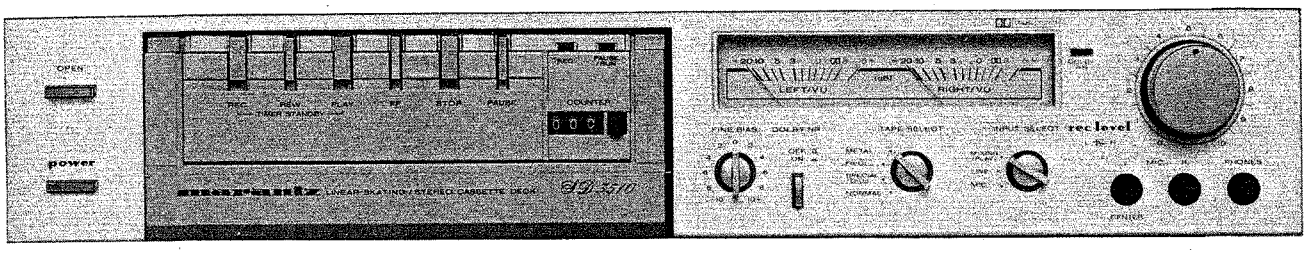
MARANTZ MODEL SD3510 CASSETTE DECK



INTRODUCTION

This service manual are prepared for use by Authorized Warranty Station and contains service information for Marantz Stereo Cassette Deck.

Servicing information and voltage data included in this manual are intended for use by the knowledgeable and experienced technician only. All instructions should be read carefully. No attempt should be made to proceed without a good understanding of the operation of the Cassette Deck.

The parts list furnishes information by which replacement parts may be ordered from the Marantz Company. A simple description is included for parts which can be usually obtained through local suppliers.

1. P.W. BOARDS

As can be seen from the circuit diagram, the chassis of your Cassette Deck consists of the following units. Each unit mounted on a printed circuit board is described within the square enclosed by a bold dotted line on the circuit diagram.

1. Audio . . . . . mounted on P.W. Board P101
2. Power Supply . . . . . mounted on P.W. Board P801
3. Rec. Level Cont. . . . . mounted on P.W. Board P102
4. LED (Dolby) . . . . . mounted on P.W. Board P103
5. Mecha Cont. . . . . mounted on P.W. Board P802
6. LED (Rec & Taperun/ Pause . . . . . mounted on P.W. Board P803
7. Meter . . . . . mounted on P.W. Board P104

2. TEST EQUIPMENT REQUIRED FOR SERVICING

For measuring or checking your Cassette Deck, the following instruments and materials are necessary.

- VTVM
- Audio Oscillator (AF OSC)
- Attenuator (600 Ω)
- Oscilloscope
- Bandpass Filter (1 kHz)
- IEC A-Curve Filter
- Wow and Flutter Meter
- Torque Meter (Cassette Type)
- Digital Frequency Counter
- Distortion Meter
- Blank Tapes (Completely erased with bulk eraser)
  TDK AC-212 (Normal)
  TDK AC-512 (Special/CrO_2)
  SONY CS-30 (Fe-Cr)
  TDK AC-711 (Metal)

NOTE: If any doubt is noted in a measured value, use new tape.

- Test Tapes (New Tape)
  MTT-111 Wow and Flutter, Tape Speed
  MTT-112 Measurements of Output Level
  MTT-112B Signal-to-Noise Ratio
  MTT-150 Adjustment of Output Level
  MTT-216 Frequency Response (for Normal)
  MTT-316 Frequency Response (for Special/CrO_2, Fe-Cr and Metal)
  MTT-121 Cross Talk
  MTT-141 Channel Separation
  MTT-111 Wow and Flutter, Tape Speed

3. MECHANISM AND CIRCUIT DESCRIPTIONS

3.1 DEFINITION OF THE SOFT TOUCH PUSHBUTTON

The conventional tape mechanism widely in use in general is such that uses the finger force to depress the push-buttons in various modes for operation of the component parts of the mechanism, whereas the soft touch type mechanism, though likewise uses the downward pressure of the finger, depends on the rotational force of the flywheel as the main motive power source, instead of the finger pressure which is merely for the start of the mechanical operation. Thus, the soft touch type mechanism provides a sense of such light operation as 200 to 400 g pressure on the buttons and 3 mm stroke.

3.2 TO SWITCH RECORDING AND PLAYBACK MODES

In the playback and recording modes, the switching is implemented by the generated DC "High" signal.

In the playback mode

The playback mode is maintained so long as no indication for recording is given. More specifically, due to the R/P switching circuits QS01 and QS02, the collector side of QS03 turns "High" and each switching element connected to the paths is turned on.

- When QJ07 and QJ08 are "ON":
  The playback equalizer amplifier output is connected to the Dolby amplifier.
- When QE01 and QE02 are "ON":
  The mic amplifier output is muted.
- When Q603 and Q604 are "ON":
  The Dolby playback output is connected to the line output, the meter, and headphone amplifier.
- When QL01 and QL02 are "ON":
  The recording amplifier is muted.

In the Recording mode

Under the mechanism's indication for recording (SJ07 is "ON"), the bias oscillating circuit is turned on and at the same time the emitter side of QS04 turns "High" due to the R/P switching circuits QS01 and QS02. Consequently, each switching element connected to the paths is turned on.

- When LJ01 is "ON":
  The recording-playback switching relay comes into operation and the R/P head earth ground is switched.
- When QE03 and QE04 are "ON":
  The mic amplifier output is connected to the Dolby amplifier.
- When Q605 and Q606 are "ON":
  The Dolby recording monitor output is connected to the line output and its subsequent stages.

3.3 PLAYBACK EQUALIZER CIRCUIT

The playback equalizer amplifier is fixed at 3180 μsec and 120 μsec with NF elements. In the 70 μsec, the CR elements are switched by means of the eletronic switching QJ05 and QJ06.

3.4 RECORDING COMPENSATION

In the recording mode, set the TAPE SELECTOR switch (SJ03) to the appropriate position. Adjust the recording sensitivity and middle range compensation element.

3.5 BIAS CURRENT

The switching of the tape-by-tape bias current is accomplished by changing the recording bias oscillating circuit input voltage which is composed of RS12~RS15, using the remaining of the tape selector switch (SJ03) circuits. This circuit also plays the role to keep the steady fine variations in the bias.

3.6 SWITCHING THE DOLBY NR AND MPX FILTER

The "ON/OFF" operation of the Dolby NR and the MPX filter is performed by the "High" signal produced in one circuit for the switch SJ02.

a. When the Dolby NR and MPX filter are in "ON" status

The "ON" side of SJ02 turns "High," the Q615/616-MPX filter switching element turns on, and the MPX filter is operated by the coils L601 and 602. Also, the Dolby NR turns on because Dolby NR release voltage is not applied to the pin (14) of the Dolby IC Q601/602.

b. When the Dolby NR and MPX filter are in "OFF" status

The "OFF" side of SJ02 turns "High," the Dolby NR release voltage is applied to the pin (14) of the Dolby IC Q601/602, and the Dolby NR turns off. Also, the pins (9) and (10) of the MPX filter coil act as an 20 kHz low pass filter because the pins are floated above the earth ground.

3.7 MUTING CIRCUITS

The muting circuit consists of the following two paths.

a. Muting when the power supply and the timer are in "ON" status

In order to achieve the muting in the amplifier's rise and the LED meter swing when the power supply and the timer are in "ON" status, a 4 sec time constant circuit (Q804) is provided at the rise of the DC 16V power supply (for the Audio).

b. Muting in PLAY and REC modes

The respective muting transistors are arranged on the playback path (Q611/Q612) and the recording path (QL01/QL02), and the muting is achieved for the speed rise time of 0.7 sec after the PLAY or REC mode has been established, using the playback and recording "High" time constant circuit connected to the "High" output transistor Q804 for the release of those elements from being muted.

3.8 MECHANICAL FULL AUTO-SHUT OFF

The take-up reel table detects the end of the tape. When the tape reaches its end in PLAY, REC, FF or REW mode, the take-up reel table stops and the lock cam is released by the TMS swing arm (825N) pin and TMS gear (831N) cam, activating the auto-shut off feature.

3.9 TAPE RUN INDICATOR

A magnet ring (2 poles) rotates in proportion to the take-up reel rotation. Lead relay (SJ06) turns on/off according to the magnet ring rotation. LED (QT07) is connected to the lead relay and flickers according to the take-up reel rotation.

3.10 DOOR OPEN SWITCH

A. To open the cassette door, depress the door open switch. The mechanism comes out smoothly due to spring force.
B. To close the mechanism, depress the mechanism itself until it stop.s

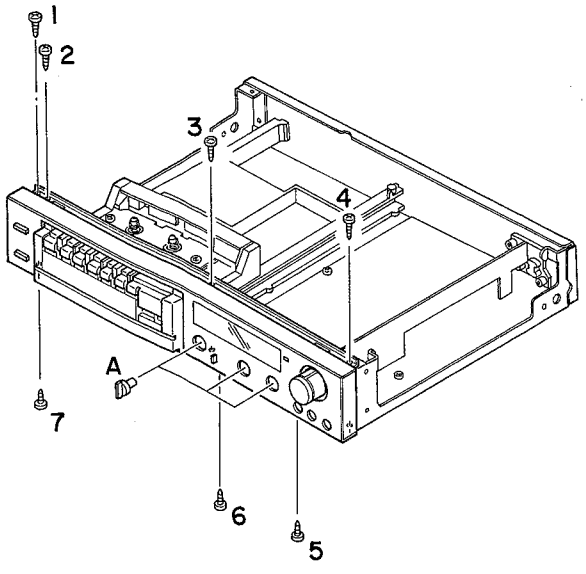
3.11 PA MIX

When selector switch SJ01 is set to MIX PLAY position in the playback mode, QJ81 goes off and high signal is output. Then, QE03 and QE04 turn on and the playback signal and mic signal are mixed.
The mixing level can be adjusted by Rec volume (RE11).

4. DISASSEMBLY

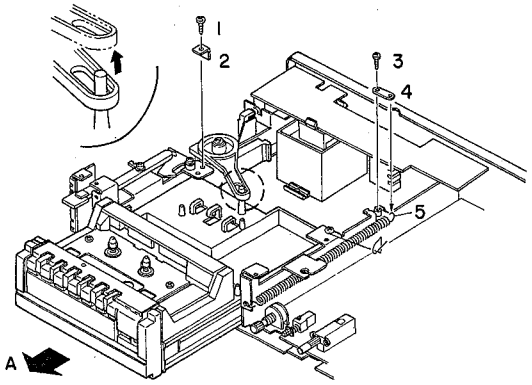
4.1 REMOVING THE FRONT PANEL

Remove screws 1 ~ 7 and pull out knob A to remove the front panel.



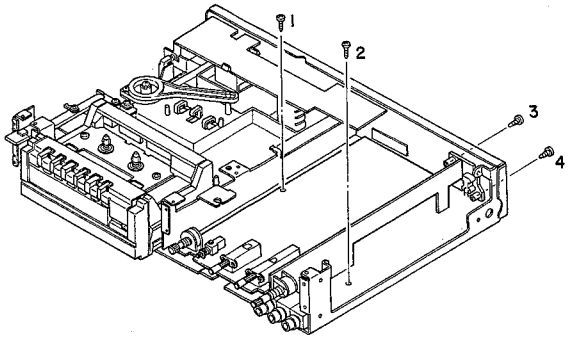
4.2 REMOVING THE MECHANISM BLOCK

1. Remove stopper 2 and screw 1, disengage spring 5 from hook 4 and remove screw 3.
2. Raise the arm in the direction of arrow A and pull the mechanism in the direction of arrow B to remove the mechanism.



4.3 REMOVING THE PRE-MAIN P.W. BOARD

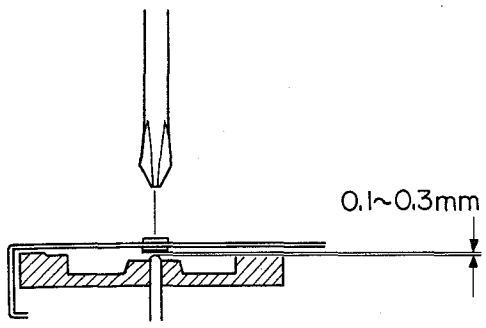
Remove screws 1 — 4 to remove the main P.W.B.



5. MECHANICAL ADJUSTMENTS

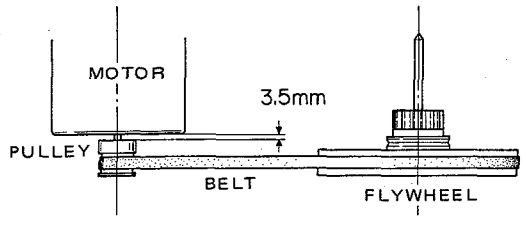
5.1 ADJUSTING THE FLYWHEEL THRUST

Adjust the thrust screw at the flywheel bracket until the clearance between the capstan tail end and the thrust bearing is 0.1 to 0.3 mm, using a philips screw driver. For adjusting, feel for axial dropping of the flywheel for proper clearance as this cannot be seen through. Then paint the screw to lock.



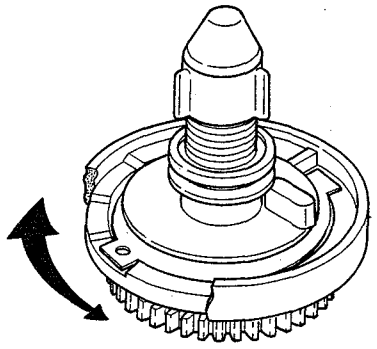
5.2 ADJUSTING THE MOTOR PULLEY

After putting the pulley on the motor shaft, attach the belt from the pulley to the flywheel. With the flywheel turning 2 or 3 times, properly position the pulley so that the belt is put the center on of the flywheel. Make sure the distance between the pulley and the motor is approx. 3.5mm.



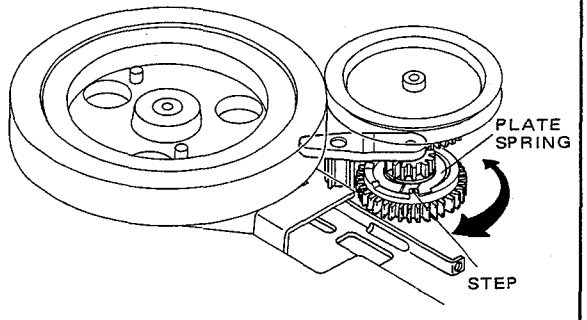
5.3 ADJUSTING THE PLAY TAKE-UP TORQUE

Hook the torque adjusting spring with one of the six steps of the idler. The winding torque should be within 40 – 65g.cm. The torque changes by approx. 5g.cm/step.



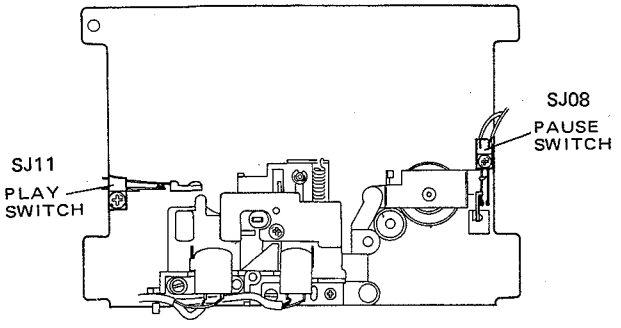
5.4 ADJUSTING THE FF/REW TORQUE

Hook the torque adjusting spring with one of the four steps of the idler. The FF/REW torque should be within 75 – 120g.cm. The torque changes by approx. 5 – 10g.cm/step.

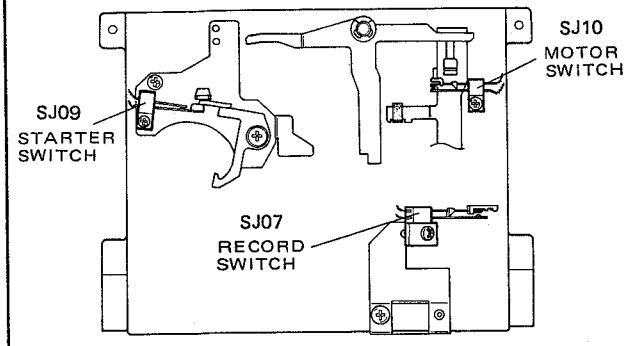


SWITCH LOCATION

FRONT



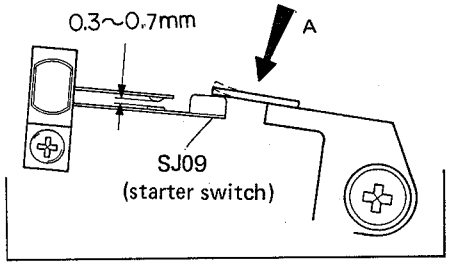
REAR

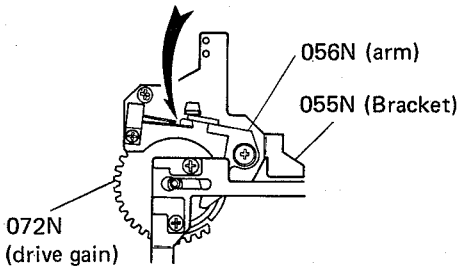


5.5 STARTER SWITCH CLEARANCE ADJUSTMENT

When the button is depressed and the starter switch is turned on, the motor starts rotating and the mechanism starts functioning. If the motor does not start rotating with any operation button depressed in stop mode, proceed as follows.

Bend A portion of the arm so that the switch contact clearance is 0.3 – 0.7mm in stop mode.





6. ELECTRICAL ADJUSTMENTS

Precautions before Adjustment

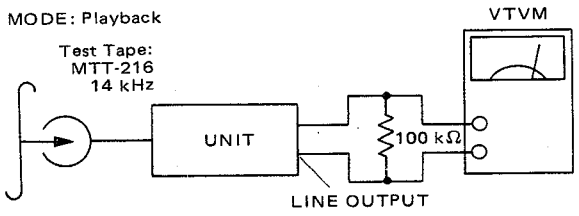
1. Before playing the test tape back, thoroughly demagnetize the heads, capstan and similar metal parts using an eraser as the test tape-recorded tone is easily erased.
2. Do not place the test tape on any measuring instrument.
3. Do not put the test tape near a place where the eraser is used.
4. Method of Demagnetization: — Turn the eraser power switch on at a remote position far away from the heads. Bring the eraser close to the heads, capstan and other parts to be demagnetized, and move it up and down four or five times to demagnetize. Slowly separate the eraser far away from the parts, and turn the power switch off.
5. Do not use any magnetized adjusting tool. When using it, demagnetize it from time to time in the course of each adjustment.
6. Do not turn semi-fixed resistor more than needed.
7. Do not apply locking bond excessively.

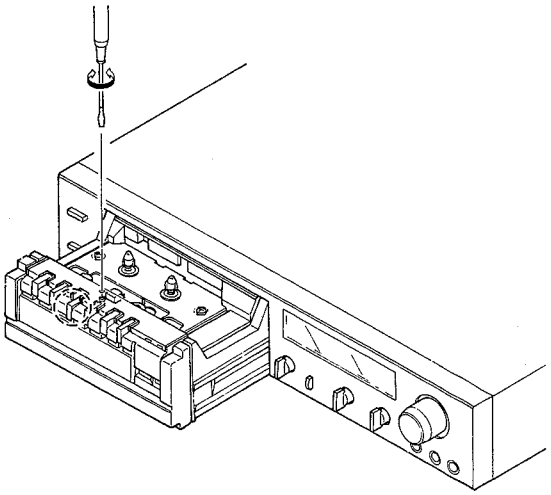
Definitions

1. The "normal playback state" is an operating state of the tape deck which plays back the MTT-150 test tape and is adjusted so as to produce a 580mV output at the T.P.7~T.P.9 terminal with the load assuming the measuring instrument input impedance of greater than 100 kΩ and with the TAPE SELECTOR switch set at the NORMAL position.
2. The "normal recording state" is an operating state of the tape deck which records a 1 kHz signal to a specified recording level for which the recording level control is adjusted with the 1 kHz signal applied at a specified input level to the MIC terminal.
   In the normal recording state, therefore, this tape deck is set up with the level control to the state that the Peak Level Displays may illuminate to the 0 VU with a 1 kHz, 1 mV input signal applied.

6.1 HEAD AZIMUTH ADJUSTMENT

1. Select the NORM Position of the TAPE SELECT switch.
2. Play the 14 kHz signal of the test tape MTT-216 back. Adjust the head azimuth adjusting screw for maximum VTVM read.
3. If the peak output reads of the right and left channels are different, set the screws to obtain the mechanical center between the peaks.
4. After adjustment, repeat the playback and stop setting a few times to make certain of no head azimuth deviation. Then, lock the screws with bond.



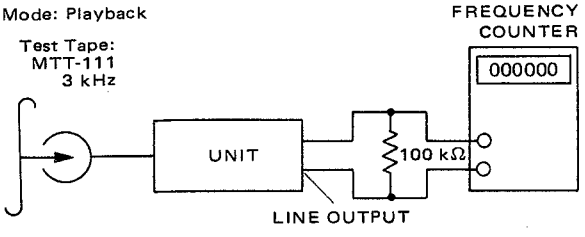


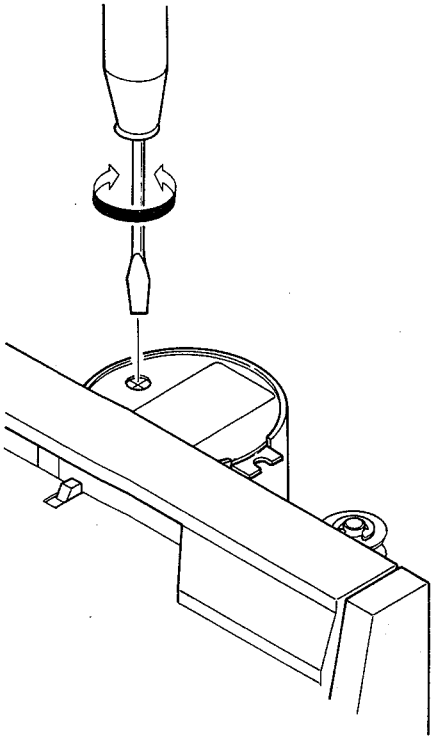
6.2 TAPE SPEED ADJUSTMENT

Play the 3 kHz signal of the test tape MTT-111 back. Adjust the tape speed adjusting resistor inside the motor (M001) for 2990 to 3010 Hz counter indication.

NOTES:

1. **If a strong shock or similar vibration is applied to the deck after adjustment, make certain that the measured tape speed had not changed.**
2. **Be careful that the frequency counter may indicate a wrong value because of too low counter input level.**
3. **Before adjustment, allow for 30 seconds or more after depressing of the PLAY button.**



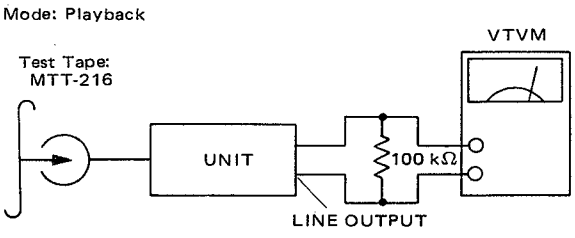


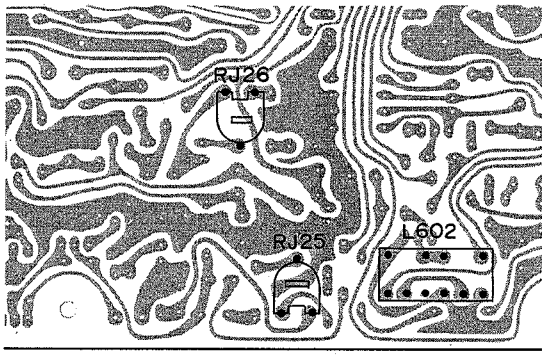
6.3 PLAYBACK EQUALIZER ADJUSTMENT

1. SELECT the NORM position of the TAPE SELECT switch.
2. Play the 315 Hz signal of the test tape MTT-216 back. Let the 315 Hz signal level be reference as 0 dB.
3. Play the 12.5 kHz signal of the test tape MTT-216 back. Adjust RJ25(L) and RJ26(R) (5 kΩ each) for 12.5 kHz frequency response of 0 to −1 dB in reference to the 315 Hz signal level.

NOTES:

1. **Proceed both for the right and left channels in the same manner.**
2. **Note that clockwise turning of RJ25(L) and RJ26(R) will increase the 14 kHz signal output level.**





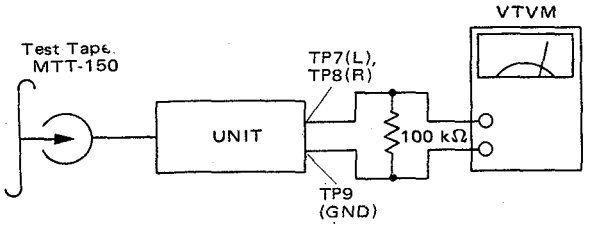
6.4 PLAYBACK OUTPUT LEVEL ADJUSTMENT

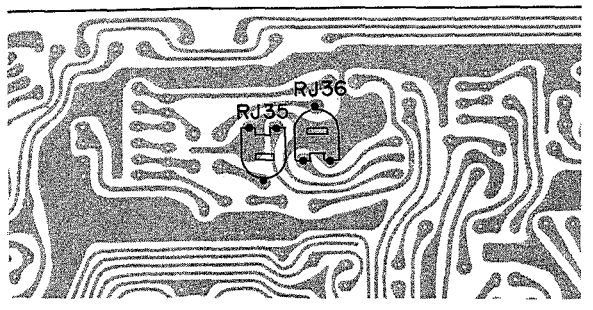
1. SELECT the NORM position of the TAPE SELECT switch.
2. Play the test tape MTT-150 back. Adjust RJ35(L) and RJ36(R) (50 kΩ each) for 580 mV playback output level at the test points TP7(L) and TP9 (GND), or TP8(R) and TP9(GND).

NOTES:

1. **Proceed both for the right and left channels in the same manner.**
2. **This adjustment should be performed after the one for the "Playback Euqalizer Adjustment".**

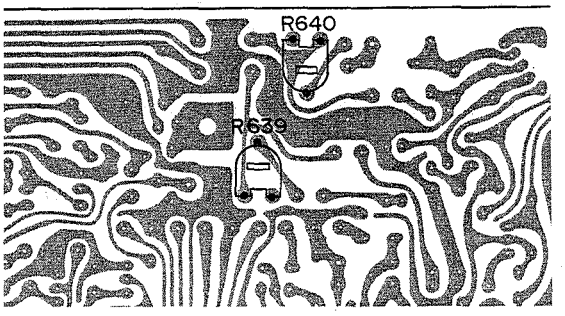
Mode: Playback





6.5 VU METER ADJUSTMENT

1. Follow the same procedures as in the "Playback Output Level Adjustment" section.
2. Adjust R639(L) and R640(R) (1 kΩ each) for DD (+2 dB) VU meter reading.

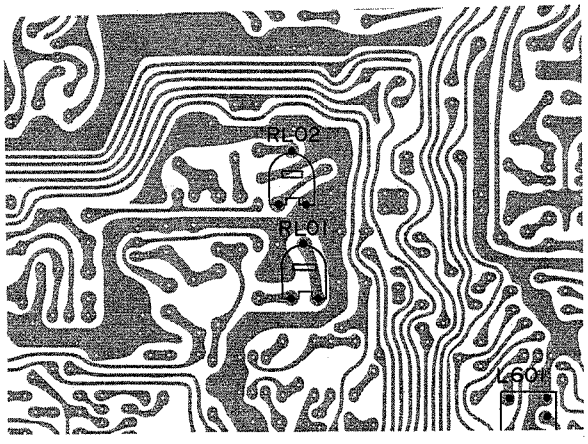


6.6 RECORD-PLAYBACK LEVEL ADJUSTMENT

1. SELECT the NORM position of the TAPE SELECT switch.
2. Connect the 1 kHz, -60 dBV signal to the MIC jack. Set up the deck to the recording state.
3. Adjust the REC LEVEL control for 0 dB VU meter reading.
4. Play the recorded portion back and adjust RL01(L) and RL02(R) for 0 dB VU meter reading.

NOTE:

Proceed both for the right and left channels in the same manner.



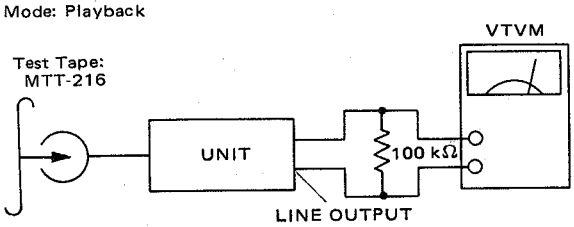
6.7 PLAYBACK FREQUENCY RESPONSE ADJUSTMENT

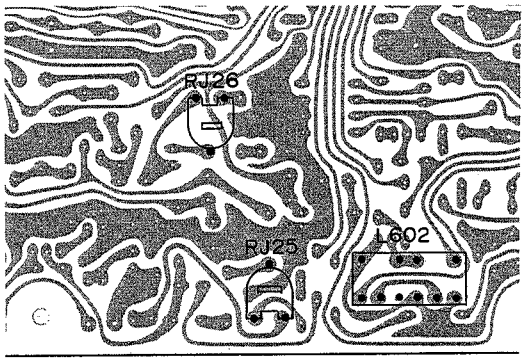
1. SELECT the NORM position of the TAPE SELECT switch.
2. Play the 31.5 Hz to 14 kHz signals of the test tape MTT-216 back.
3. Adjust RJ25(L) and RJ26(R) so that the 12.5 kHz response is within 0 to −1 dB as reference to the 40 Hz, 0 dB response.
4. Depress the SPECIAL/CrO_2 button of the TAPE SELECT buttons.
5. Play the test tape MTT-316 back. Then, make sure that the 40 Hz and 12.5 kHz signals are within 0 to −1 dB.

NOTE:

This adjustment should be performed after the one for the "Head Azimuth Adjustment".

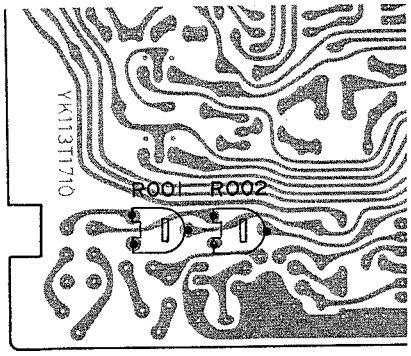
Mode: Playback





6.8 RECORDING BIAS CURRENT ADJUSTMENT

1. SELECT the NORM position of TAPE SELECT switch.
2. Set up the deck to the recording state.
3. Adjust RO01(L) and RO02(R) for 3.2 mV reading (bias currents are 320 μA) at the test points TP1(L) and TP2(GND), or TP3(R) and TP4(GND).
4. Make sure that the following values are obtained by SELECTION the SPECIAL/CrO_2, FeCr, and METAL position.
   SPECIAL/CrO_2: 4.2 mV, FeCr: 3.6 mV, METAL: 6.0 mV.



6.9 RECORD-PLAYBACK FREQUENCY RESPONSE ADJUSTMENT

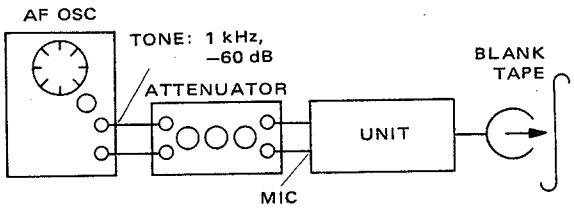
SET UP

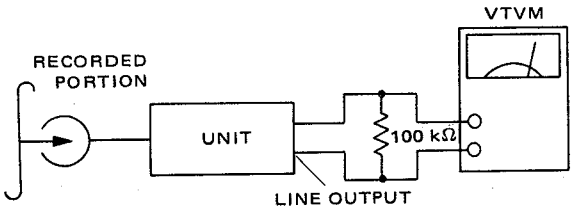
1. Power voltage · · · 50 Hz/60 Hz AC voltage rated for the unit to be used in a market country.
2. TAPE SELECTOR switch position · · · NORMAL.
3. Input signal · · · 1 kHz, -60 dB with -23 dB referenced as 0 VU.
4. Output terminal · · · LINE OUT.
5. Load · · · Measuring instrument input impedance.
6. Test tape used · · · AC-212, AC-512, CS-30, AC-711.

PROCEDURES

1. Connect the input signal to the MIC terminal. Set up the unit to the normal recording state.
2. In turn, reduse the input level by 23 dB with the use of the attenuator. Record the 1 kHz and 12.5 kHz tones.
3. Play the 1 kHz, 23 dB down recorded tone back as 0 dB. Adjust the recording bias current until the 12.5 kHz response is within ±1 dB as referenced to the 1 kHz, 0 dB response.
4. Proceed both for the right and left channels in the same manner.
5. If the recording current is recorded reduced in the above adjustment be sure to measure the distortion.

Mode: Record



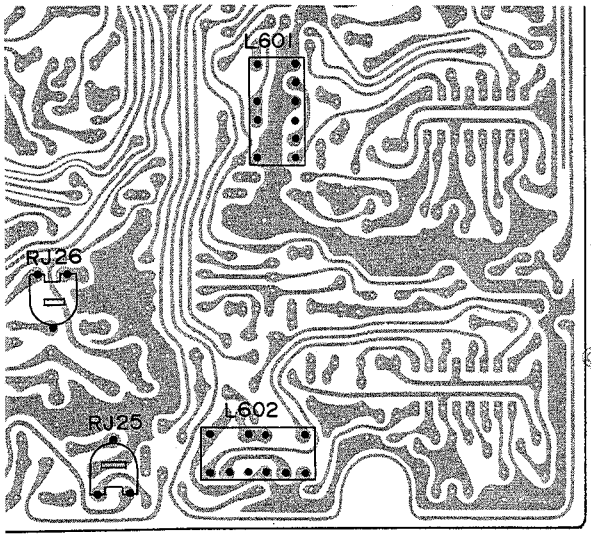


6.10 BIAS TRAP ADJUSTMENT

1. SELECT the METAL position of the TAPE SELECT switch.
2. Adjust L601(L) and L602(R) for minimum leak bias at the LINE OUTPUT jacks.

NOTES:

1. **If the leak bias less than the specified value, the bias trap needs not to be adjusted.**
2. **The adjusting screwdriver should be non-metalic.**



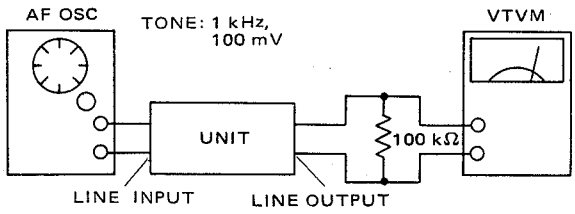
6.11 MPX FILTER ADJUSTMENT

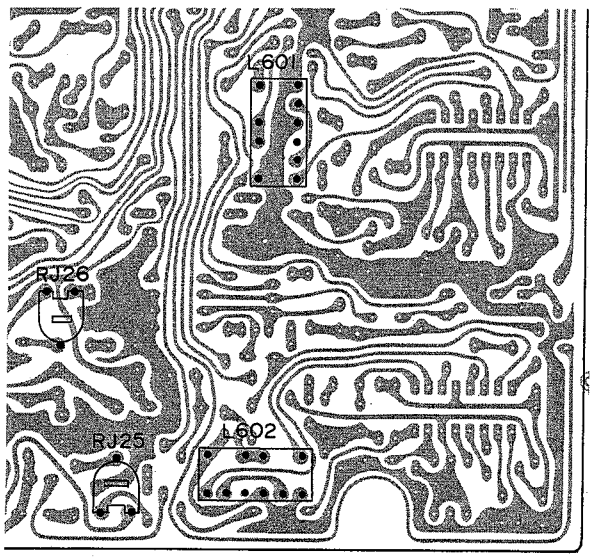
1. SELECT the NORM position of the TAPE SELECT switch.
2. Connect the 1 kHz, 100 mV input signal to the LINE INPUT jack.
3. Set up the deck to the recording state.
4. Adjust the REC LEVEL control for 0 dB meter reading.
5. Adjust the line output level for 0 dB, and turn the DOLBY NR switch to the ON position.
6. Turn the input signal to the 19 kHz.
7. Adjust L601(L) and L602(R) for minimum output level.

NOTES:

1. **Proceed both for the right and left channels in the same manner.**
2. **If the filter characteristic is better than 30 dB, the MPX filter needs not to be adjusted.**

Mode: Record



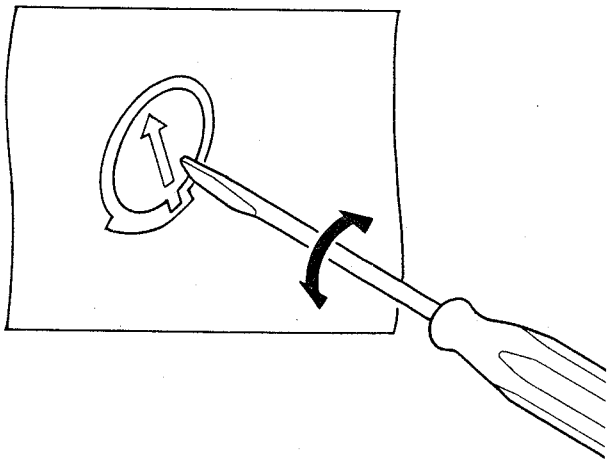


MEMO

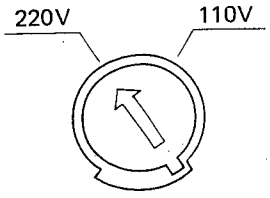
7. VOLTAGE CONVERSION

To convert the unit to a different power source voltage, change the position as illustrated in the drawing below.

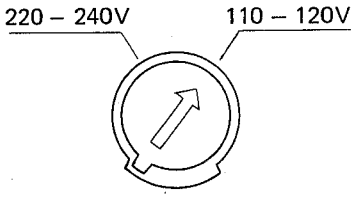
CAUTION: DISCONNECT POWER SUPPLY CORD FROM AC OUTLET BEFORE CONVERTING VOLTAGE. DO NOT DISASSEMBLE THE VOLTAGE SELECTOR ABSOLUTERY.



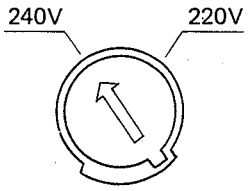
(N) VERSION



(P) VERSION



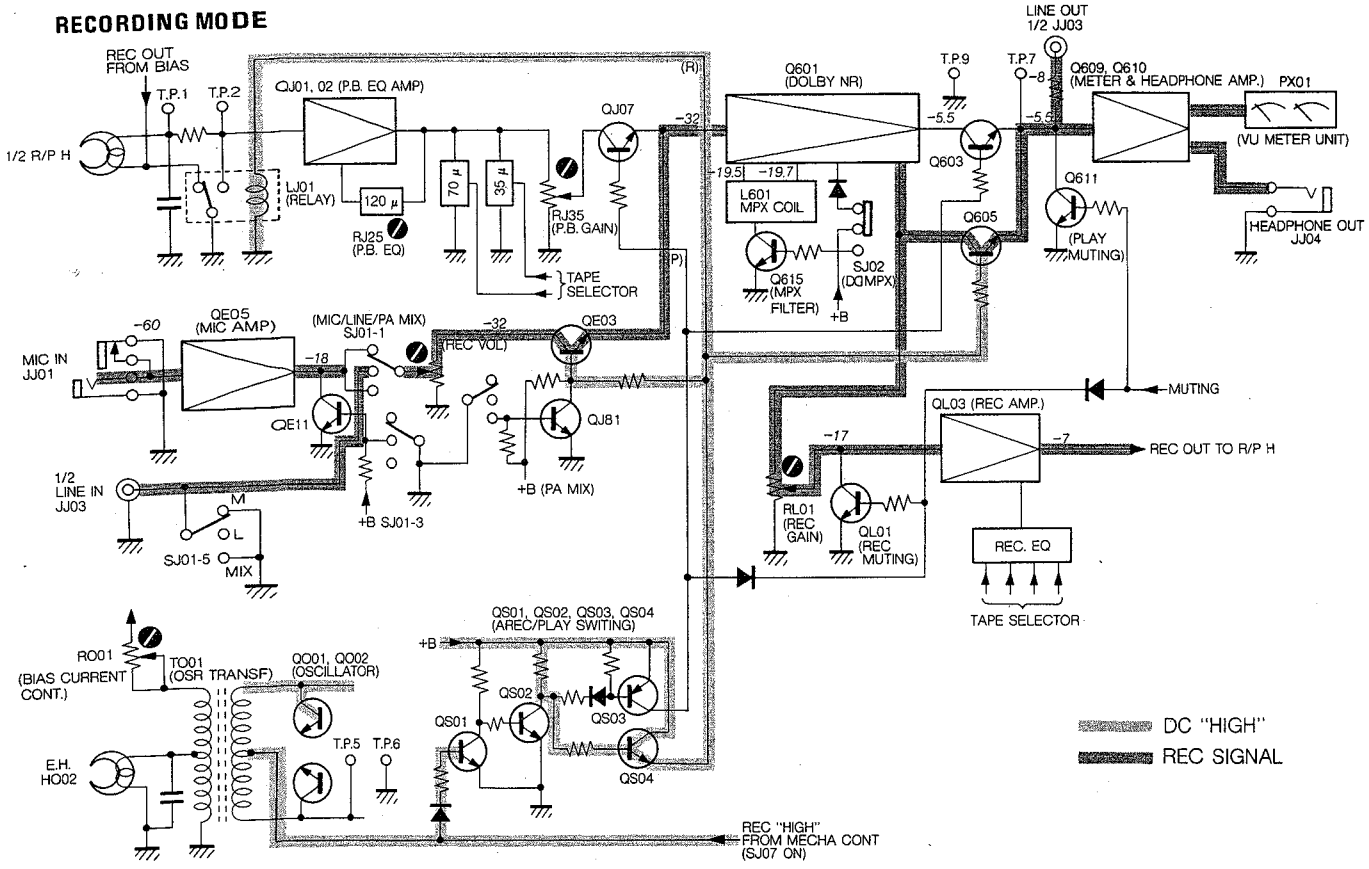
(T/A) VERSIONS



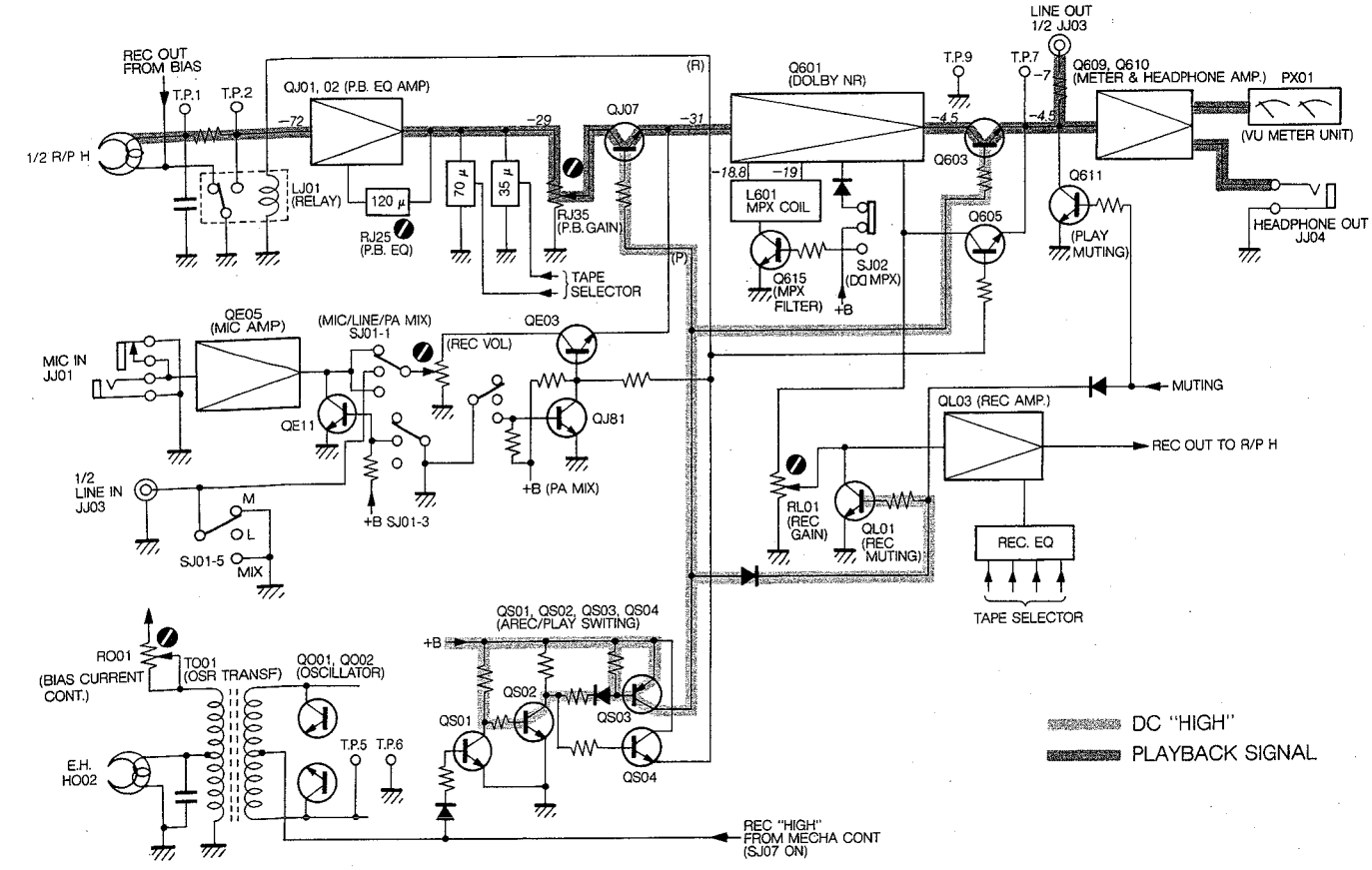
NOTE ON SAFETY: THE PARTS MARKED WITH ⚠ ARE IMPORTANT PARTS ON THE SAFETY. PLEASE USE THE PARTS HAVING THE DESIGNATED PARTS NUMBERS WITHOUT FAIL.

8.1 BLOCK AND LEVEL DIAGRAMS

RECORDING MODE

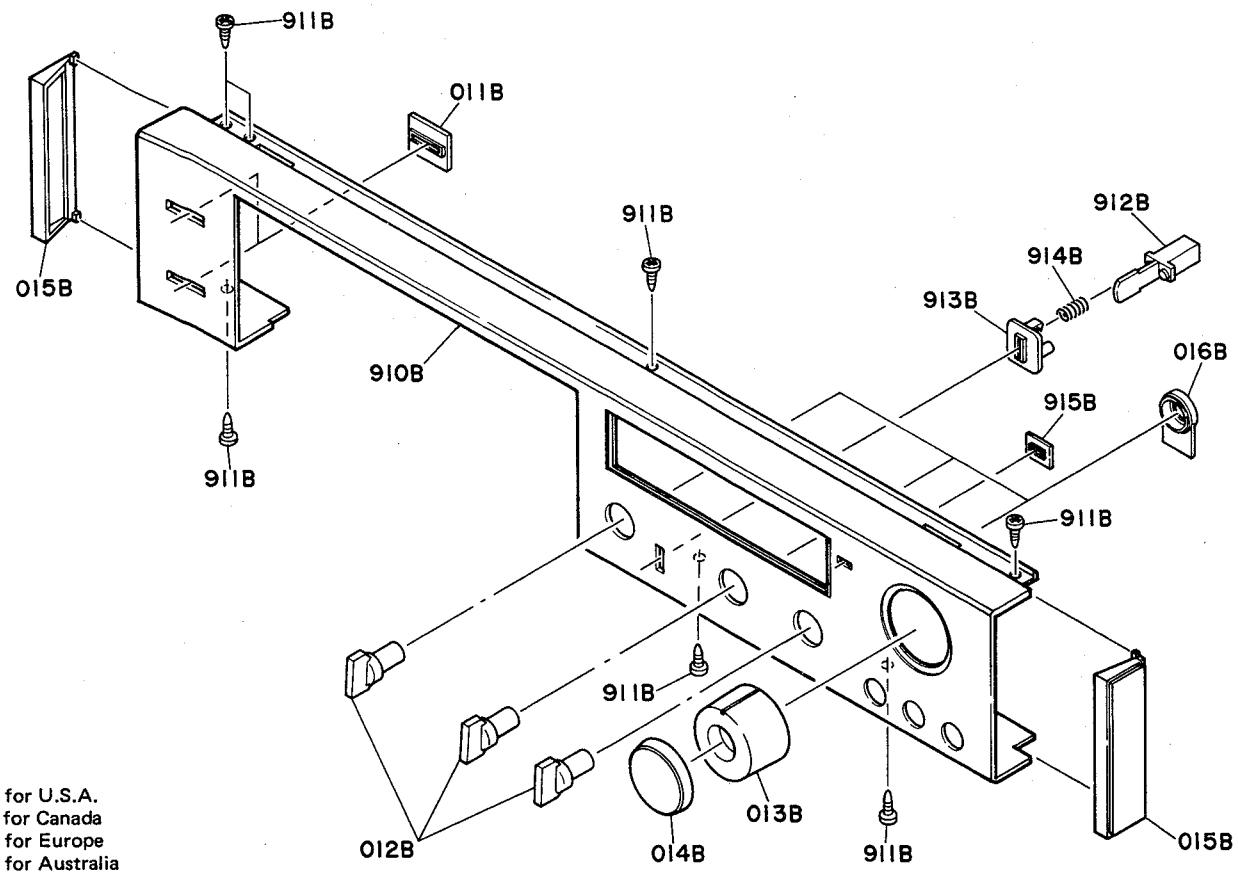


PLAYBACK MODE



9. EXPLODED VIEWS AND PARTS LIST

9.1 [C01-99] FRONT PANEL

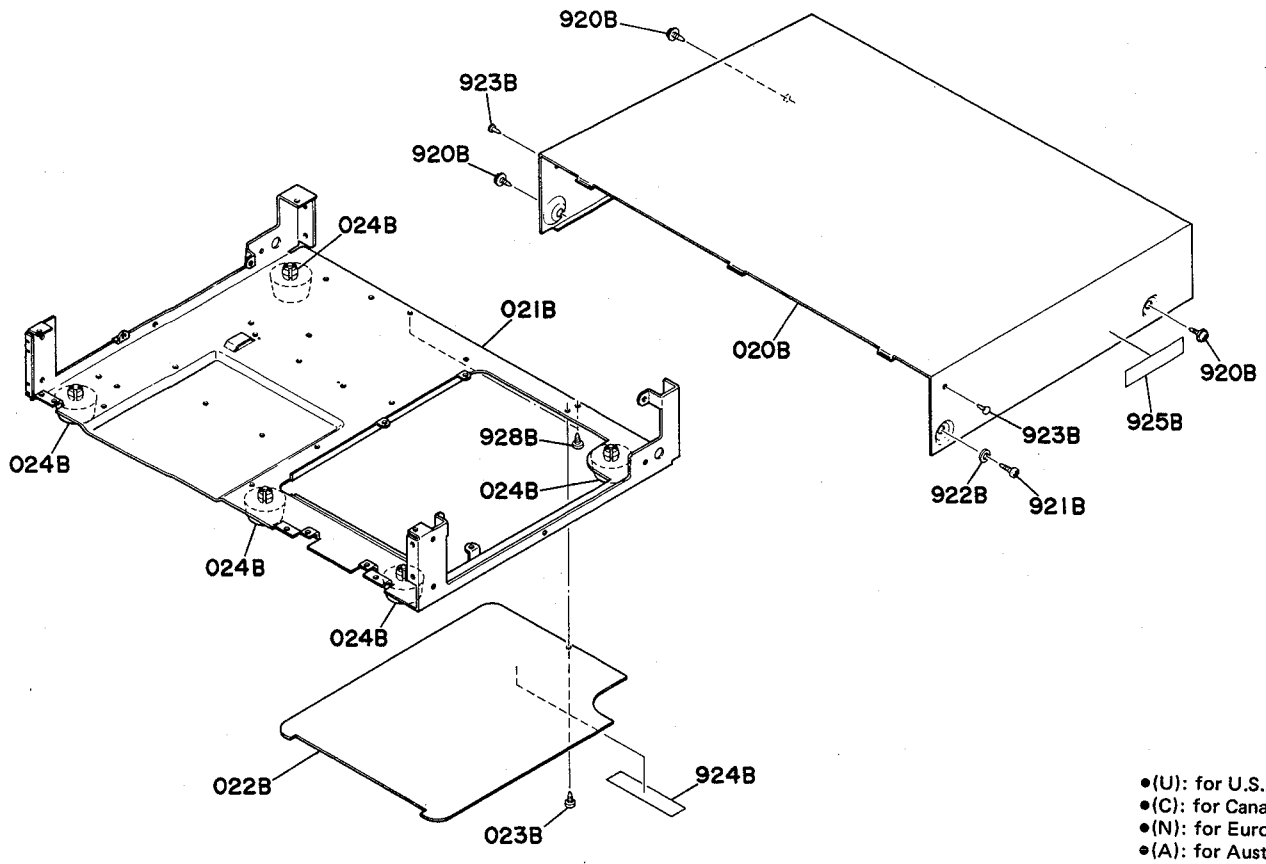


- (U): for U.S.A.
- (C): for Canada
- (N): for Europe
- (A): for Australia
- (P): for PX

REF. DESIG.	Q'TY U	C	N	A	P	PART NO.	DESCRIPTION
A	1	1	1	1	1	113T063400	Front Panel Assembly
011B	2	2	2	2	2	208H259010	Bushing, Power/Open
015B	2	2	2	2	2	403H067010	Cap
016B	3	3	3	3	3	113T259030	Bushing
910B	1	1	1	1	1	113T063060	Escutcheon, Front Panel
912B	1	1	1	1	1	102T270010	Button, Dolby NR
913B	1	1	1	1	1	113T259010	Bushing, Dolby NR
914B	1	1	1	1	1	102T115010	Spring
915B	1	1	1	1	1	113T259020	Bushing, LED

REF. DESIG.	Q'TY U	C	N	A	P	PART NO.	DESCRIPTION
012B	3	3	3	3	3	113T154010	Knob
013B	1	1	1	1	1	102T154010	Knob, Rec Level (L)
014B	1	1	1	1	1	102T154020	Knob, Rec Level (R)
911B	7	7	7	7	7	51280306B0	B.H. Tapped Screw B3x6

9.2 [C02-99] TOP COVER AND MAIN CHASSIS

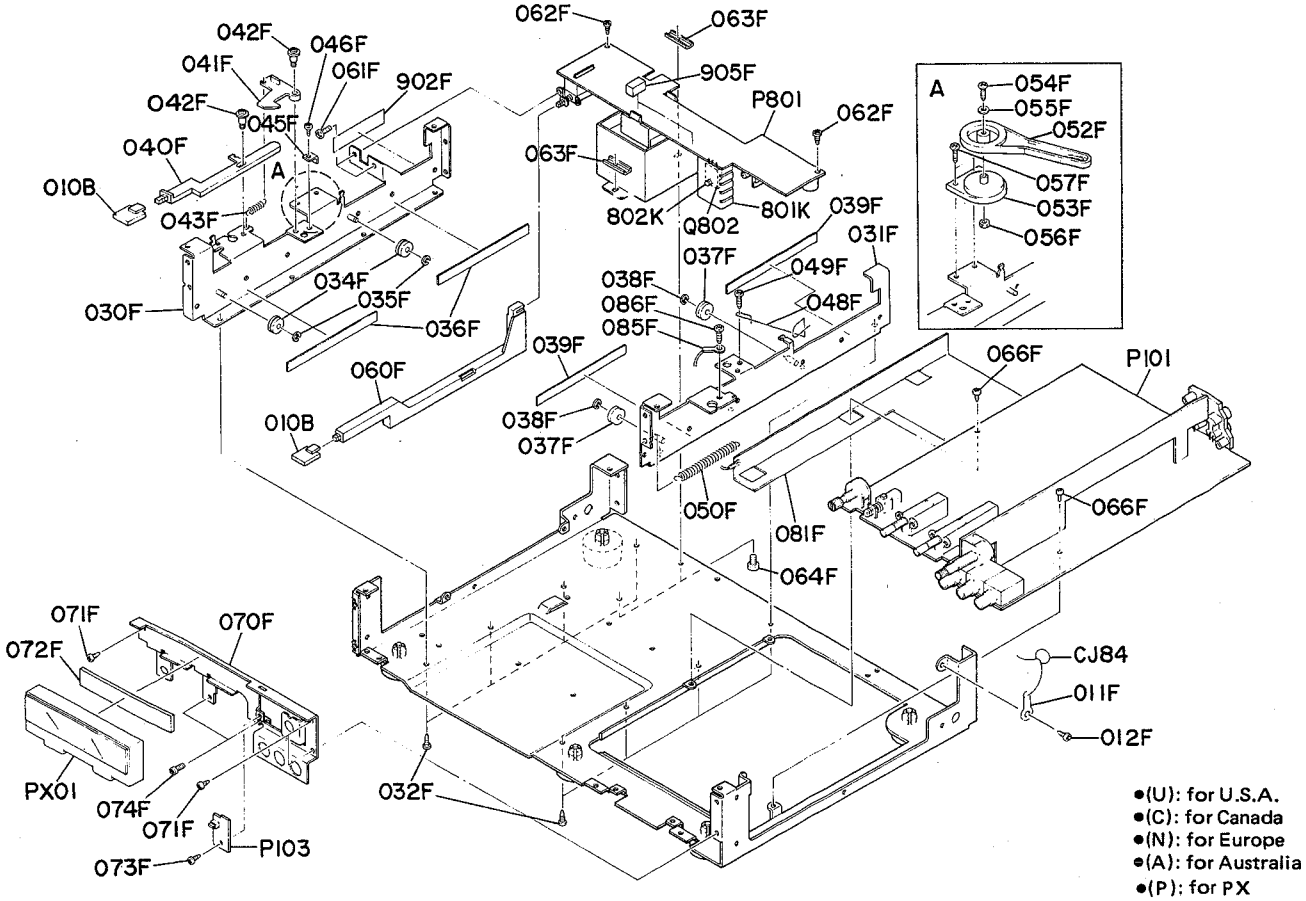


- (U): for U.S.A.
- (C): for Canada
- (N): for Europe
- (A): for Australia
- (P): for PX

REF. DESIG.	Q'TY U	C	N	A	P	PART NO.	DESCRIPTION
020B	1	1	1	1	1	102T257010	Lid, Top Cover
021B	1	1	1	1	1	113T105010	Chassis, Main
022B	1	1	1	1	1	102T257020	Lid, Chassis
023B	1	1	1	1	1	51280304B0	B.H. Tapped Screw B3x6
024B	5	5	5	5	5	403H057010	Leg

REF. DESIG.	Q'TY U	C	N	A	P	PART NO.	DESCRIPTION
920B	3	3				51260408Z0	B.T. Screw B4x8
920B			3	3	3	51260408U0	B.T. Screw B4x8
921B	1	1				51260406Z0	B.H. Tapped Screw B4x6
921B			1	1	1	51260406U0	B.H. Tapped Screw B4x6
922B	1	1				54020401Z0	Flat Washer, P.
922B			1	1	1	54020401S0	Flat Washer, P.
923B	2	2	2	2	2	2991259010	Bushing
924B	1		1	1	1	102T861030	Label
925B	1		1	1	1	2932861010	Label
928B	2	2	2	2	2	51280304B0	B.H. Tapped Screw B3x6

9.5 [P02-99] P.W. BOARDS AND OTHER PARTS



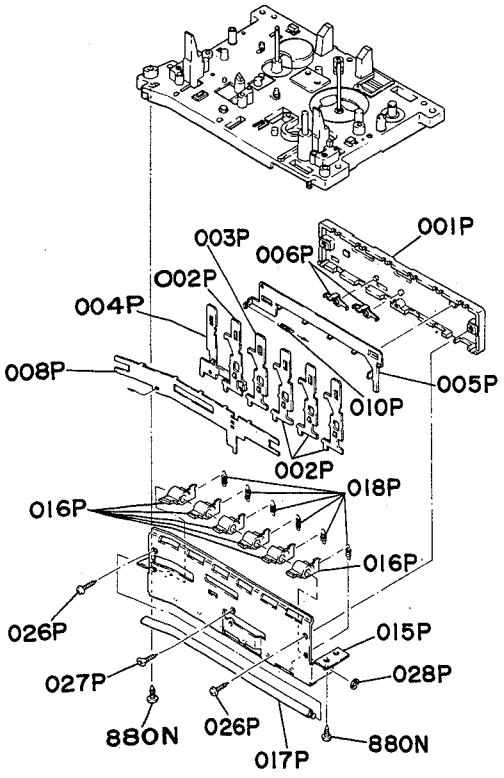
- (U): for U.S.A.
- (C): for Canada
- (N): for Europe
- (A): for Australia
- (P): for PX

REF. DESIG.	Q'TY U	C	N	A	P	PART NO.	DESCRIPTION
010B	2	2	2	2	2	208H154060	Knob, Power/Open
011F	1	1	1	1	1	62041740W0	Lug
012F	1	1	1	1	1	51280406B0	B.H. Tapped Screw B4x6
030F	1	1	1	1	1	113T104010	Retainer, Left
031F	1	1	1	1	1	113T104020	Retainer, Right
032F	8	8	8	8	8	51500306B0	F.H. Tapped Screw F3x6
034F	2	2	2	2	2	102T358010	Roller
035F	2	2	2	2	2	64000300R0	RG Ring, E Type
036F	2	2	2	2	2	113T118010	Spacer
037F	2	2	2	2	2	102T358010	Roller
038F	2	2	2	2	2	64000300R0	RG Ring, E Type
039F	2	2	2	2	2	113T118010	Spacer
040F	1	1	1	1	1	113T354010	Lever, Open
041F	1	1	1	1	1	113T258010	Hook, Open
042F	2	2	2	2	2	4367112260	Shaft
043F	1	1	1	1	1	4367115240	Spring
045F	1	1	1	1	1	113T114010	Stopper
046F	1	1	1	1	1	51280306B0	B.H. Tapped Screw B3x6
048F	1	1	1	1	1	113T005010	Clamper
049F	1	1	1	1	1	51280306B0	B.H. Tapped Screw B3x6
050F	1	1	1	1	1	113T115010	Spring
052F	1	1	1	1	1	113T002020	Arm
053F	1	1	1	1	1	113T262020	Pulley
054F	1	1	1	1	1	51100312A9	B.H.M. Screw B3x12
055F	1	1	1	1	1	54020301A6	Flat Washer, P.
056F	1	1	1	1	1	53110303A9	Hexagon Nut
057F	2	2	2	2	2	51280308B0	B.H. Tapped Screw B3x6

REF. DESIG.	Q'TY U	C	N	A	P	PART NO.	DESCRIPTION
060F	1	1	1	1	1	102T121010	Link, Power Switch
061F	2	2	2	2	2	51100306A9	B.H.M. Screw B3x6
062F	2	2	2	2	2	51280306B9	B.H. Tapped Screw B3x6
063F	2	2	2	2	2	2922005010	Clamper
064F	2	2	2	2	2	51100408A9	B.H.M. Screw B4x8
066F	2	2	2	2	2	51280306B0	B.H. Tapped Screw B3x6
070F	1	1	1	1	1	113T160010	Bracket, VU Meter
071F	3	3	3	3	3	51280306B0	B.H. Tapped Screw B3x6
072F	1	1	1	1	1	113T056010	Buffer
073F	1	1	1	1	1	51280306B0	B.H. Tapped Screw B3x6
074F	2	2	2	2	2	51100306A9	B.H.M. Screw B3x6
081F	1	1	1	1	1	113T109500	Shield
085F	1	1	1	1	1	62031240W0	Lug
056F	1	1	1	1	1	51280306B0	B.H. Tapped Screw B3x6
902F	1	1				113T107020	Sheet
905F	2	2	2	2	2	4292056029	Buffer
801K	1	1	1	1	1	202H267030	Heatsink
802K	1	1	1	1	1	51300306B0	P.H. Tapped Screw B3x6
CJ84	1	1	1	1	1	DK18103300	Ceramic Cap. 0.01μF
Q802	1	1	1	1	1	HT403131E0	Transistor 2SD313 (E)
PX01	1	1	1	1	1	IM12110010	D.C. Meter, VU

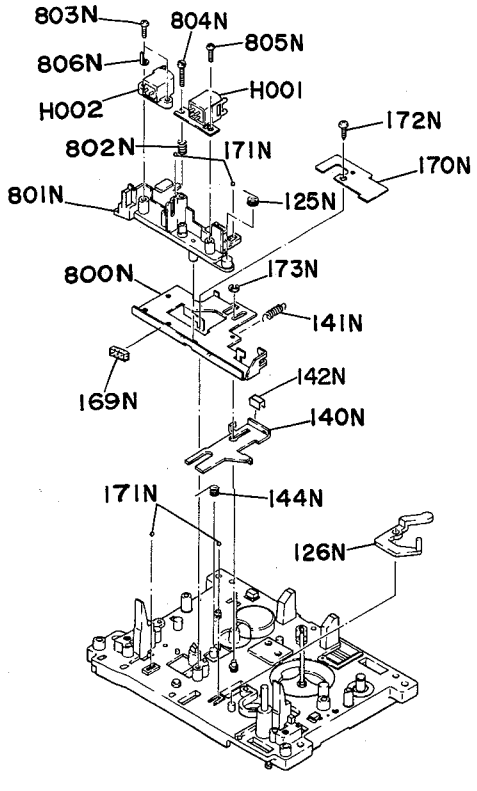
- •(U): for U.S.A.
- •(C): for Canada
- •(N): for Europe
- •(A): for Australia
- •(P): for PX

9.6 [P03-99] OPERATION LEVERS



REF. DESIG.	Q'TY U	C	N	A	P	PART NO.	DESCRIPTION
001P	1	1	1	1	1	307Y051010	Guide
002P	4	4	4	4	4	307Y354130	Lever
003P	1	1	1	1	1	307Y354140	Lever, Play
004P	1	1	1	1	1	307Y354150	Lever, Rec
005P	1	1	1	1	1	307Y354110	Lever, Starter
006P	2	2	2	2	2	307Y002120	Arm
008P	1	1	1	1	1	307Y054020	Cam, Button Lock
010P	1	1	1	1	1	307Y115140	Spring, Lock Cam
015P	1	1	1	1	1	307Y160020	Bracket
016P	6	6	6	6	6	307Y002040	Arm
017P	1	1	1	1	1	307Y112070	Shaft
018P	6	6	6	6	6	307Y115120	Spring
026P	2	2	2	2	2	51302608B0	P.H. Tapped Screw P2.6x8
027P	1	1	1	1	1	51502606B0	F.H. Tapped Screw F2.6x6
028P	1	1	1	1	1	64002500R0	RG Ring, E Type
880N	2	2	2	2	2	51300308B0	P.H. Tapped Screw P3x8

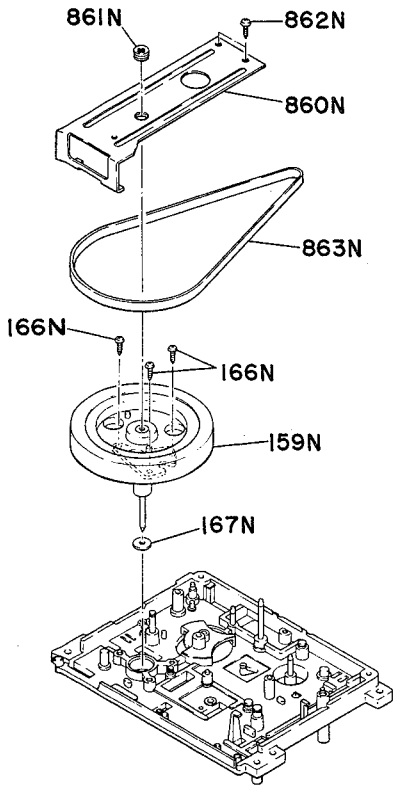
9.7 [P04-99] HEAD CHASSIS



REF. DESIG.	Q'TY U	C	N	A	P	PART NO.	DESCRIPTION
125N	1	1	1	1	1	307Y115230	Spring
126N	1	1	1	1	1	307Y002020	Arm, Take-up
140N	1	1	1	1	1	307Y354090	Lever
141N	1	1	1	1	1	307Y115110	Spring
144N	1	1	1	1	1	307Y115060	Spring
170N	1	1	1	1	1	307Y115030	Spring
171N	4	4	4	4	4	61020010T0	Ball
172N	1	1	1	1	1	51302606B0	P.H. Tapped Screw P2.6x6
173N	1	1	1	1	1	64001500R0	RG Ring, E Type
800N	1	1	1	1	1	307Y105020	Chassis, Head
801N	1	1	1	1	1	307Y160010	Bracket
802N	1	1	1	1	1	4383115030	Spring, Azimuth
803N	2	2	2	2	2	51100214A0	B.H.M. Screw B2x14
804N	1	1	1	1	1	51190213A0	Screw B2x13
805N	1	1	1	1	1	51100214A0	B.H.M. Screw B2x14
806N	1	1	1	1	1	62021030W0	Lug
H001	1	1	1	1	1	LH42951020	Rec/Play Head
H002	1	1	1	1	1	LH31000510	Erase Head
142N	1	1	1	1	1	307Y056020	Buffer
169N	1	1	1	1	1	307Y056010	Buffer

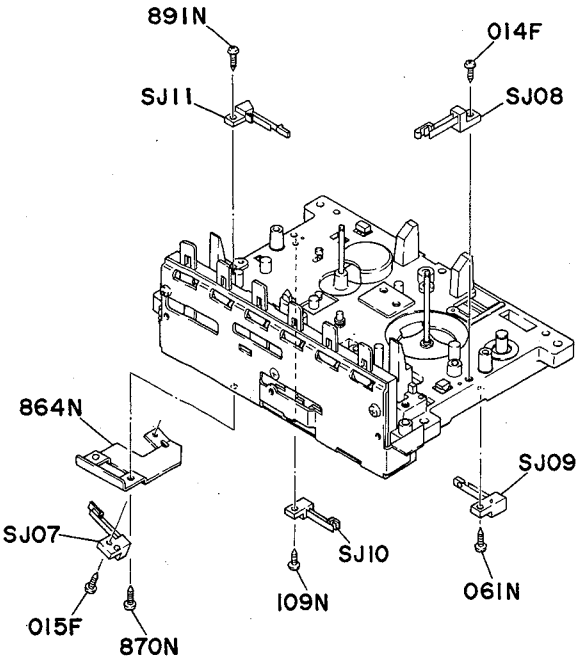
- (U): for U.S.A.
- (C): for Canada
- (N): for Europe
- (A): for Australia
- (P): for PX

9.8 [P05-99] FLYWHEEL



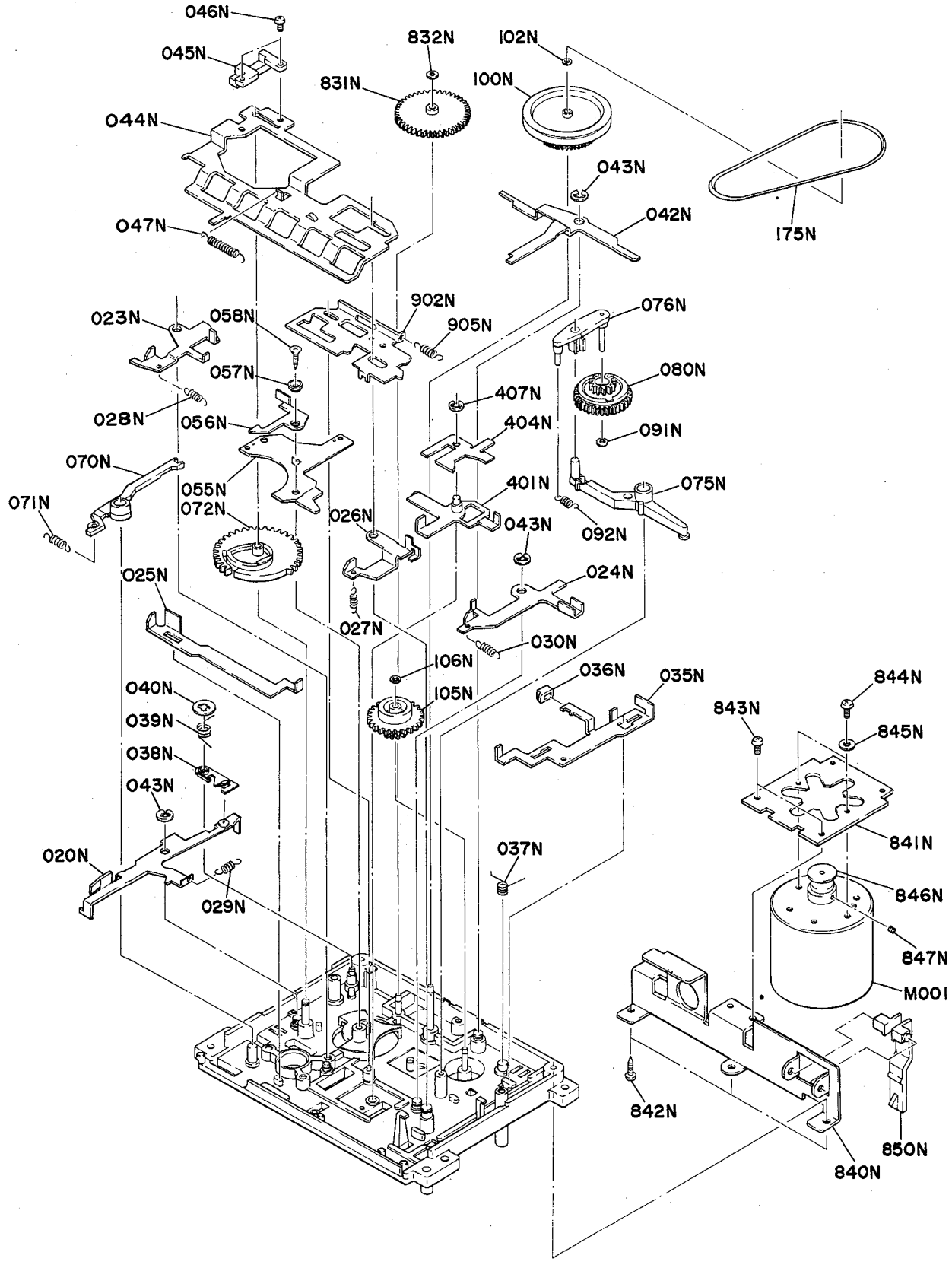
REF. DESIG.	Q'TY U	C	N	A	P	PART NO.	DESCRIPTION
159N	1	1	1	1	1	307Y273400	Flywheel
166N	3	3	3	3	3	51302608B0	P.H. Tapped Screw P2.6x8
167N	1	1	1	1	1	306Y118010	Spacer
860N	1	1	1	1	1	307Y104010	Retainer
861N	1	1	1	1	1	3483164020	Adjuster
862N	2	2	2	2	2	51572604A0	P. Taptite Screw P2.6x4
863N	1	1	1	1	1	307Y264010	Belt, Motor

9.9 [P06-99] SWITCH LOCATION



REF. DESIG.	Q'TY U	C	N	A	P	PART NO.	DESCRIPTION
014F	1	1	1	1	1	51382308P0	P.H. Tapped Screw P2.3x8
015F	1	1	1	1	1	51302608B0	P.H. Tapped Screw P2.6x8
061N	1	1	1	1	1	51060204A0	P.H.M. Screw P2x4
109N	1	1	1	1	1	51302608B0	P.H. Tapped Screw P2.6x8
864N	1	1	1	1	1	307Y160080	Bracket
870N	2	2	2	2	2	51572604A0	P. Taptite Screw P2.6x4
891N	1	1	1	1	1	51302608B0	P.H. Tapped Screw P2.6x8
SJ07	1	1	1	1	1	SM01010910	Mini Switch, Rec
SJ08	1	1	1	1	1	SM01010900	Mini Switch, Pause
SJ09	1	1	1	1	1	SM01010850	Mini Switch, Starter
SJ10	1	1	1	1	1	SM01010870	Mini Switch, Motor
SJ11	1	1	1	1	1	SM01010750	Mini Switch, Muting

9.11 [P08-99] PARTS ASSEMBLED ON REVERSE OF CHASSIS

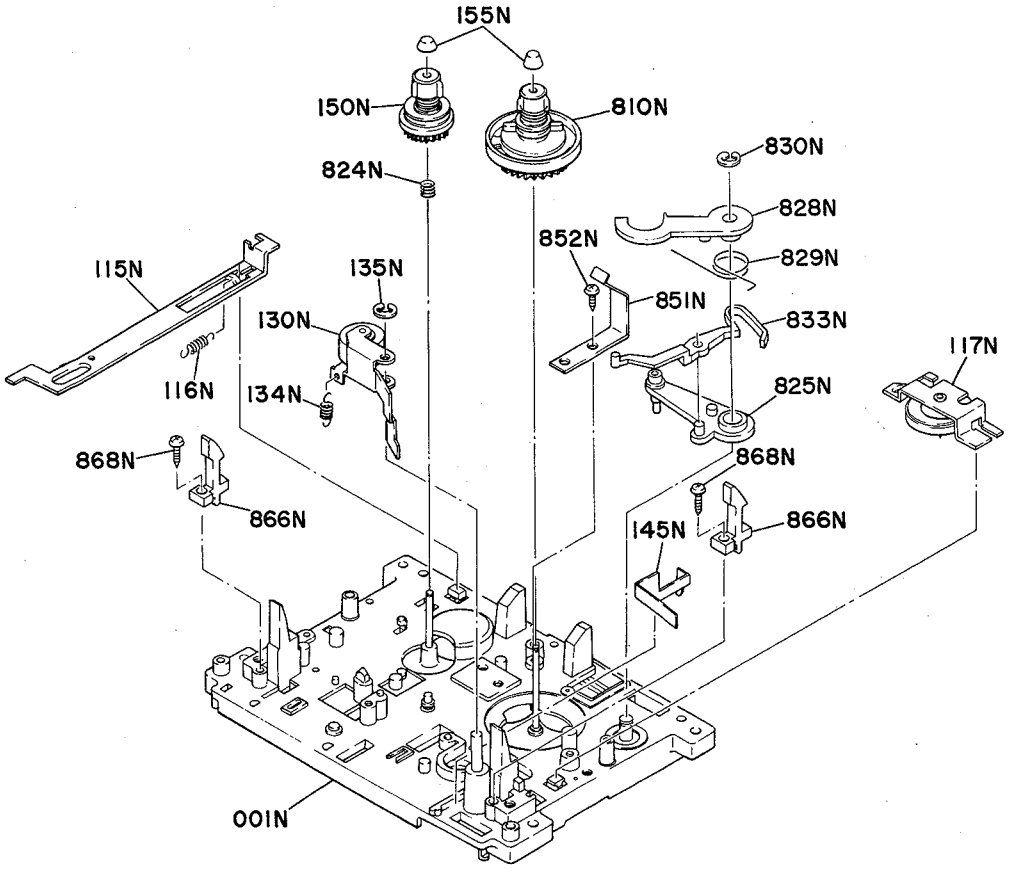


- (U): for U.S.A.
- (C): for Canada
- (N): for Europe
- (A): for Australia
- (P): for PX

REF. DESIG.	Q'TY U	C	N	A	P	PART NO.	DESCRIPTION
020N	1	1	1	1	1	307Y354400	Lever, Pause
023N	1	1	1	1	1	307Y354020	Lever, FF
024N	1	1	1	1	1	307Y354030	Lever, REW
025N	1	1	1	1	1	307Y354050	Lever, Stop
026N	1	1	1	1	1	307Y354040	Lever, Rec
027N	1	1	1	1	1	307Y115160	Spring
028N	1	1	1	1	1	307Y115160	Spring
029N	1	1	1	1	1	307Y115240	Spring
030N	1	1	1	1	1	307Y115160	Spring
035N	1	1	1	1	1	307Y354070	Lever, Brake
036N	1	1	1	1	1	4367263010	Brake
037N	1	1	1	1	1	307Y115090	Spring
038N	1	1	1	1	1	307Y054040	Cam, Pause Lock
039N	1	1	1	1	1	307Y115080	Spring
040N	1	1	1	1	1	64020300Q0	RG Ring, CS Type
042N	1	1	1	1	1	307Y002100	Arm
043N	3	3	3	3	3	64000300R0	RG Ring, E Type
044N	1	1	1	1	1	307Y127010	Control Board
045N	1	1	1	1	1	307Y114010	Stopper
046N	2	2	2	2	2	51062604A0	P.H.M. Screw P2.6x4
047N	1	1	1	1	1	307Y115150	Spring
055N	1	1	1	1	1	307Y160030	Bracket, Starter SW.
056N	1	1	1	1	1	307Y002110	Arm
057N	1	1	1	1	1	307Y259010	Bushing
058N	1	1	1	1	1	51502610P0	F.H. Tapped Screw F2.6x10
059N	1	1	1	1	1	51302608B0	P.H.M. Screw P2.6x8
070N	1	1	1	1	1	307Y002030	Arm
071N	1	1	1	1	1	307Y115140	Spring
072N	1	1	1	1	1	307Y058050	Grar, Drive
075N	1	1	1	1	1	307Y002080	Arm, REW
076N	1	1	1	1	1	307Y002400	Arm, FF/REW
080N	1	1	1	1	1	307Y058400	Gear
091N	1	1	1	1	1	64001500R0	RG Ring, E Type
092N	1	1	1	1	1	307Y115200	Spring
100N	1	1	1	1	1	307Y262020	Pulley
102N	1	1	1	1	1	307Y118010	Spacer
105N	1	1	1	1	1	307Y058040	Gear, REW
106N	1	1	1	1	1	307Y118010	Spacer
175N	1	1	1	1	1	307Y264020	Belt
401N	1	1	1	1	1	307Y354410	Lever, Play
404N	1	1	1	1	1	307Y354100	Lever,Brake
407N	1	1	1	1	1	64002500R0	RG Ring, E Type
831N	1	1	1	1	1	307Y058060	Gear, TMS

REF. DESIG.	Q'TY U	C	N	A	P	PART NO.	DESCRIPTION
832N	1	1	1	1	1	307Y118010	Spacer
840N	1	1	1	1	1	307Y160070	Bracket
841N	1	1	1	1	1	307Y160050	Bracket, Motor
842N	3	3	3	3	3	51300308B0	P.H. Tapped Screw P3x8
843N	2	2	2	2	2	51062604B0	P.H.M. Screw P2.6x4
844N	2	2	2	2	2	51062603A0	P.H.M. Screw P2.6x3
845N	2	2	2	2	2	54012600E0	Flat Washer, S.
846N	1	1	1	1	1	307Y262050	Pulley, Motor
847N	1	1	1	1	1	51690305Q9	Socket Screw, HP M3x5
850N	1	1	1	1	1	307Y002090	Arm, Rec Safety
902N	1	1	1	1	1	307Y054050	Cam, Lock
905N	1	1	1	1	1	4367115120	Spring
M001	1	1	1	1	1	MM11200160	D.C. Motor, Governor 2200rpm

9.10 [P08-99] PARTS ASSEMBLED ON TOP OF CHASSIS

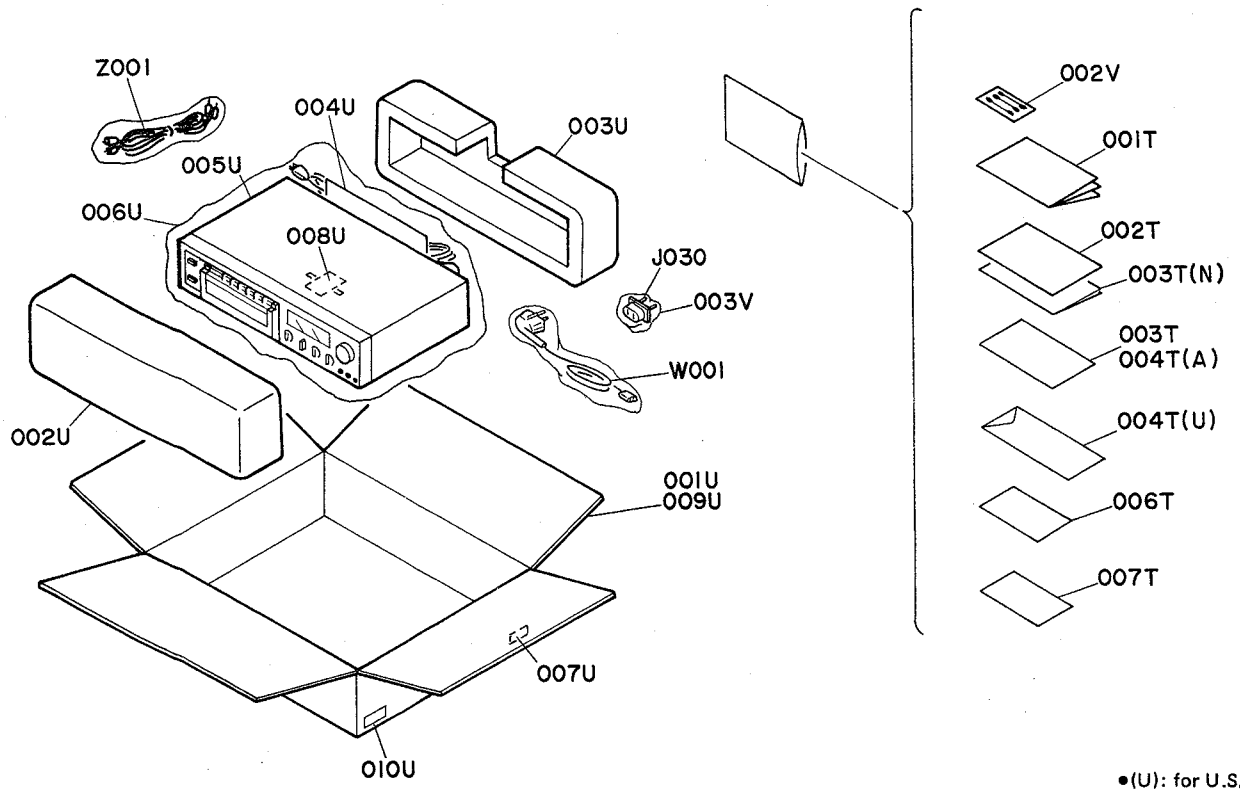


- (U): for U.S.A.
- (C): for Canada
- (N): for Europe
- (A): for Australia
- (P): for PX

REF. DESIG.	Q'TY U	C	N	A	P	PART NO.	DESCRIPTION
001N	1	1	1	1	1	307Y105400	Chassis, Main
115N	1	1	1	1	1	307Y354080	Lever, Rec Safety
116N	1	1	1	1	1	307Y115140	Spring
117N	1	1	1	1	1	307Y354430	Lever, Take-up Idler
130N	1	1	1	1	1	307Y002410	Arm, Pinch Roller
134N	1	1	1	1	1	307Y115100	Spring
135N	1	1	1	1	1	64002500R0	RG Ring, E Type
145N	1	1	1	1	1	307Y115040	Spring
150N	1	1	1	1	1	307Y004400	Table, Supply
155N	2	2	2	2	2	4367067010	Cap

REF. DESIG.	Q'TY U	C	N	A	P	PART NO.	DESCRIPTION
810N	1	1	1	1	1	307Y004410	Table, Take-up
824N	1	1	1	1	1	307Y115250	Spring
825N	1	1	1	1	1	307Y002420	Arm, TMS
828N	1	1	1	1	1	307Y002060	Arm, TMS Senser
829N	1	1	1	1	1	307Y115070	Spring
830N	1	1	1	1	1	64000300R0	RG Ring, E Type
851N	1	1	1	1	1	307Y115130	Spring
852N	1	1	1	1	1	5130260680	P.H. Tapped Screw P2.6x6
866N	2	2	2	2	2	307Y002200	Arm, Cassette
868N	2	2	2	2	2	5130260880	P.H. Tapped Screw P2.6x8
833N	1	1	1	1	1	307Y002210	Arm Canceller

9.12 [H01-99] PACKING MATERIALS



- (U): for U.S.A.
- (C): for Canada
- (N): for Europe
- (A): for Australia
- (P): for PX

REF. DESIG.	Q'TY U	C	N	A	P	PART NO.	DESCRIPTION
001T	1					113T851010	Instruction
001T		1	1	1	1	113T851310	Instructions
002T	1					113T851020	Instructions
002T		1				113T851220	Instructions
002T			1	1	1	113T851320	Instructions
003T	1					2818854020	Guarantee Card
003T		1				2818854040	Guarantee Card
003T			1			113T856010	Circuit Diagram
003T					1	2818854010	Guarantee Card
004T	1					2225813010	Envelope
004T				1		9631000090	Guarantee Card
006T		1				9650000050	S. Station Card
006T					1	9650000010	S. Station Card
007T					1	3435851210	Instructions
001U				1		113T801040	Packing Case
001U					1	113T801060	Packing Case
002U	1	1	1	1	1	113T809010	Cushion
003U	1	1	1	1	1	001H809010	Cushion
004U	1	1				2918107390	Sheet
005U	1	1	1	1	1	2918107350	Sheet
006U	1	1	1	1	1	9090909040	Polyethylene Sheet

REF. DESIG.	Q'TY U	C	N	A	P	PART NO.	DESCRIPTION
007U	2					9526019010	Selial No. Card
007U		4				9526019020	Selial No. Card
007U			4			9526019030	Selial No. Card
007U				4		9526019060	Selial No. Card
007U					3	9526019050	Selial No. Card
008U			1			2731821010	Silicagel
010U		2				9510901020	Label
901U	1	1				113T801020	Packing Case
901U			1			113T801040	Packing Case
002V	1	1	1	1	1	4136071010	Cleaner
003V					1	9011325010	Polyethylene Bag
J030					1	YJ04000240	Jack, AC Adaptor
⚠W001			1			ZC01805010	A.C. Power Cord
⚠W001				1		ZC02006020	A.C. Power Cord
⚠W001					1	ZC01800170	A.C. Power Cord
Z001	2	2	2	2	2	ZD01000170	Connective Cord

- (U): for U.S.A.
- (C): for Canada
- (N): for Europe
- (A): for Australia
- (P): for PX

9.13 ELECTRICAL PARTS

REF. DESIG.	Q'TY U	C	N	A	P	PART NO.	DESCRIPTION
							P101-AUDIO CIRCUIT BOARD
P101	1	1	1	1	1	YK113T1710	P.W. Board, Audio
	1	1	1	1	1	ZZ113T1710	P.W. Board Assembly
							P101-CAPACITORS
C601	1	1	1	1	1	EA10505030	Elect 1μF 50V
C602	1	1	1	1	1	EA10505030	Elect 1μF 50V
C603	1	1	1	1	1	EA10602530	Elect 10μF 25V
C604	1	1	1	1	1	EA10602530	Elect 10μF 25V
C605	1	1	1	1	1	EA10405030	Elect 0.1μF 50V
C606	1	1	1	1	1	EA10405030	Elect 0.1μF 50V
C607	1	1	1	1	1	EA33405030	Elect 0.33μF 50V
C608	1	1	1	1	1	EA33405030	Elect 0.33μF 50V
C609	1	1	1	1	1	DF15473300	Film 0.047μF ±5%
C610	1	1	1	1	1	DF15473300	Film 0.047μF ±5%
C611	1	1	1	1	1	EA10602530	Elect 10μF 25V
C612	1	1	1	1	1	EA10602530	Elect 10μF 25V
C613	1	1	1	1	1	DF15273300	Film 0.027μF ±5%
C614	1	1	1	1	1	DF15273300	Film 0.027μF ±5%
C615	1	1	1	1	1	DF15472300	Film 4700pF ±5%
C616	1	1	1	1	1	DF15472300	Film 4700pF ±5%
C617	1	1	1	1	1	DF15562300	Film 5600pF ±5%
C618	1	1	1	1	1	DF15562300	Film 5600pF ±5%
C619	1	1	1	1	1	EA10701630	Elect 100μF 16V
C620	1	1	1	1	1	EA10701630	Elect 100μF 16V
C621	1	1	1	1	1	EA10702530	Elect 100μF 25V
C622	1	1	1	1	1	EA10702530	Elect 100μF 25V
C623	1	1	1	1	1	DF15102300	Film 0.001μF ±5%
C624	1	1	1	1	1	DF15102300	Film 0.001μF ±5%
C625	1	1	1	1	1	EA10602530	Elect 10μF 25V
C626	1	1	1	1	1	EA10602530	Elect 10μF 25V
C627	1	1	1	1	1	EA10602530	Elect 10μF 25V
C628	1	1	1	1	1	EA10602530	Elect 10μF 25V
C629	1	1	1	1	1	EA10602530	Elect 10μF 25V
C630	1	1	1	1	1	EA10602530	Elect 10μF 25V
C631	1	1	1	1	1	EA10602530	Elect 10μF 25V
C632	1	1	1	1	1	EA10602530	Elect 10μF 25V
C633	1	1	1	1	1	EA47505030	Elect 4.7μF 50V
C634	1	1	1	1	1	EA47505030	Elect 4.7μF 50V
C635	1	1	1	1	1	EA10505030	Elect 1μF 50V
C636	1	1	1	1	1	EA10505030	Elect 1μF 50V
C637	1	1	1	1	1	EA10702530	Elect 100μF 25V
C638	1	1	1	1	1	EA10702530	Elect 100μF 25V
C639	1	1	1	1	1	EA22505030	Elect 2.2μF 50V
C640	1	1	1	1	1	EA22505030	Elect 2.2μF 50V
C641	1	1	1	1	1	EA10601630	Elect 10μF 16V
C642	1	1	1	1	1	EA10601630	Elect 10μF 16V
C643	1	1	1	1	1	DD15471370	Ceramic 470pF ±5%
C644	1	1	1	1	1	DD15471370	Ceramic 470pF ±5%

REF. DESIG.	Q'TY U	C	N	A	P	PART NO.	DESCRIPTION
CE01	1	1	1	1	1	DD15470370	Ceramic 47pF ±5%
CE02	1	1	1	1	1	DD15470370	Ceramic 47pF ±5%
CE03	1	1	1	1	1	EA10505030	Elect 1μF 50V
CE04	1	1	1	1	1	EA10505030	Elect 1μF 50V
CE05	1	1	1	1	1	DD15150370	Ceramic 15pF ±5%
CE06	1	1	1	1	1	DD15150370	Ceramic 15pF ±5%
CE07	1	1	1	1	1	EA10701630	Elect 100μF 16V
CE08	1	1	1	1	1	EA10701630	Elect 100μF 16V
CE09	1	1	1	1	1	EA10505030	Elect 1μF 50V
CE10	1	1	1	1	1	EA10505030	Elect 1μF 50V
CE11	1	1	1	1	1	EA10505030	Elect 1μF 50V
CE12	1	1	1	1	1	EA10505030	Elect 1μF 50V
CE13	1	1	1	1	1	EA10505030	Elect 1μF 50V
CE14	1	1	1	1	1	EA10505030	Elect 1μF 50V
CE15	1	1	1	1	1	EA10505030	Elect 1μF 50V
CE16	1	1	1	1	1	EA10505030	Elect 1μF 50V
CE81	1	1	1	1	1	EA10702530	Elect 100μF 25V
CJ01	1	1	1	1	1	DF55361090	Film 360pF ±5%
CJ02	1	1	1	1	1	DF55361090	Film 360pF ±5%
CJ03	1	1	1	1	1	EA47505030	Elect 4.7μF 50V
CJ04	1	1	1	1	1	EA47505030	Elect 4.7μF 50V
CJ05	1	1	1	1	1	EA22602530	Elect 22μF 25V
CJ06	1	1	1	1	1	EA22602530	Elect 22μF 25V
CJ07	1	1	1	1	1	DD15470370	Ceramic 47pF ±5%
CJ08	1	1	1	1	1	DD15470370	Ceramic 47pF ±5%
CJ09	1	1	1	1	1	EA47601630	Elect 47μF 16V
CJ10	1	1	1	1	1	EA47601630	Elect 47μF 16V
CJ11	1	1	1	1	1	EA10602530	Elect 10μF 25V
CJ12	1	1	1	1	1	EA10602530	Elect 10μF 25V
CJ13	1	1	1	1	1	EA10602530	Elect 10μF 25V
CJ14	1	1	1	1	1	EA10602530	Elect 10μF 25V
CJ15	1	1	1	1	1	DF15153300	Film 0.015μF ±5%
CJ16	1	1	1	1	1	DF15153300	Film 0.015μF ±5%
CJ17	1	1	1	1	1	DF15102300	Film 0.001μF ±5%
CJ18	1	1	1	1	1	DF15102300	Film 0.001μF ±5%
CJ19	1	1	1	1	1	DF15822300	Film 8200pF ±5%
CJ20	1	1	1	1	1	DF15822300	Film 8200pF ±5%
CJ21	1	1	1	1	1	EA10505030	Elect 1μF 50V
CJ22	1	1	1	1	1	EA10505030	Elect 1μF 50V
CJ23	1	1	1	1	1	EA10505030	Elect 1μF 50V
CJ24	1	1	1	1	1	EA10505030	Elect 1μF 50V
CJ25	1	1	1	1	1	EA10702530	Elect 100μF 25V
CJ26	1	1	1	1	1	EA10702530	Elect 100μF 25V
CJ27	1	1	1	1	1	EA10505030	Elect 1μF 50V
CJ28	1	1	1	1	1	EA10505030	Elect 1μF 50V
CJ29	1	1	1	1	1	EA47601630	Elect 47μF 16V
CJ30	1	1	1	1	1	EA47601630	Elect 47μF 16V
CJ81	1	1	1	1	1	EA33505030	Elect 3.3μF 50V
CJ82	1	1	1	1	1	DK18103300	Ceramic 0.01μF
CJ83	1	1	1	1	1	DK18103300	Ceramic 0.01μF
CJ84	1	1	1	1	1	DK18103300	Ceramic 0.01μF

- (U): for U.S.A.
- (C): for Canada
- (N): for Europe
- (A): for Australia
- (P): for PX

REF. DESIG.	Q'TY U	C	N	A	P	PART NO.	DESCRIPTION
CL01	1	1	1	1	1	EA47505030	Elect 4.7μF 50V
CL02	1	1	1	1	1	EA47505030	Elect 4.7μF 50V
CL03	1	1	1	1	1	EA47601630	Elect 47μF 16V
CL04	1	1	1	1	1	EA47601630	Elect 47μF 16V
CL05	1	1	1	1	1	EA22405030	Elect 0.22μF 50V
CL06	1	1	1	1	1	EA22405030	Elect 0.22μF 50V
CL07	1	1	1	1	1	EA47505030	Elect 4.7μF 50V
CL08	1	1	1	1	1	EA47505030	Elect 4.7μF 50V
CL09	1	1	1	1	1	EA47505030	Elect 4.7μF 50V
CL10	1	1	1	1	1	EA47505030	Elect 4.7μF 50V
CL11	1	1	1	1	1	DD15101370	Ceramic 100pF ±5%
CL12	1	1	1	1	1	DD15101370	Ceramic 100pF ±5%
CL13	1	1	1	1	1	DF15152300	Film 1500pF ±5%
CL14	1	1	1	1	1	DF15152300	Film 1500pF ±5%
CL15	1	1	1	1	1	DF15563300	Film 0.056μF ±5%
CL16	1	1	1	1	1	DF15563300	Film 0.056μF ±5%
CL17	1	1	1	1	1	DF15103300	Film 0.01μF ±5%
CL18	1	1	1	1	1	DF15103300	Film 0.01μF ±5%
CL19	1	1	1	1	1	DF15103300	Film 0.01μF ±5%
CL20	1	1	1	1	1	DF15103300	Film 0.01μF ±5%
CL21	1	1	1	1	1	DF15333300	Film 0.033μF ±5%
CL22	1	1	1	1	1	DF15333300	Film 0.033μF ±5%
CL49	1	1	1	1	1	DF15822300	Film 8200pF ±5%
CL50	1	1	1	1	1	DF15822300	Film 8200pF ±5%
CO01	1	1	1	1	1	DF55221090	Film 220pF ±5%
CO02	1	1	1	1	1	DF55221090	Film 220pF ±5%
CO03	1	1	1	1	1	DF75153510	Film 0.015μF ±5%
CO04	1	1	1	1	1	DF75562510	Film 5600pF ±5%
CO05	1	1	1	1	1	DF15682300	Film 6800pF ±5%
CO06	1	1	1	1	1	DF15682300	Film 6800pF ±5%
CO07	1	1	1	1	1	DF15333300	Film 0.033μF ±5%
CO08	1	1	1	1	1	DF15333300	Film 0.033μF ±5%
CO09	1	1	1	1	1	EA22505030	Elect 2.2μF 50V
CS01	1	1	1	1	1	EA10702530	Elect 100μF 25V
CS02	1	1	1	1	1	EA22701030	Elect 220μF 10V
CS03	1	1	1	1	1	EA10505030	Elect 1μF 50V
CS04	1	1	1	1	1	EA10505030	Elect 1μF 50V
							P101-RESISTORS (All Resistors are ±5% & ¼W)
R601	1	1	1	1	1	GD05274140	270KΩ
R602	1	1	1	1	1	GD05274140	270KΩ
R603	1	1	1	1	1	GD05473140	47KΩ
R604	1	1	1	1	1	GD05473140	47KΩ
R605	1	1	1	1	1	GD05332140	3.3KΩ
R606	1	1	1	1	1	GD05332140	3.3KΩ
R607	1	1	1	1	1	GD05181140	180Ω
R608	1	1	1	1	1	GD05181140	180Ω
R609	1	1	1	1	1	GD05104140	100KΩ
R610	1	1	1	1	1	GD05104140	100KΩ

REF. DESIG.	Q'TY U	C	N	A	P	PART NO.	DESCRIPTION
R611	1	1	1	1	1	GD05104140	100KΩ
R612	1	1	1	1	1	GD05104140	100KΩ
⚠R613	1	1	1	1	1	GG05470140	47Ω
⚠R614	1	1	1	1	1	GG05470140	47Ω
R615	1	1	1	1	1	GD05104140	100KΩ
R616	1	1	1	1	1	GD05104140	100KΩ
R617	1	1	1	1	1	GD05104140	100KΩ
R618	1	1	1	1	1	GD05104140	100KΩ
R619	1	1	1	1	1	GD05104140	100KΩ
R620	1	1	1	1	1	GD05104140	100KΩ
R621	1	1	1	1	1	GD05153140	15KΩ
R622	1	1	1	1	1	GD05153140	15KΩ
R623	1	1	1	1	1	GD05102140	1KΩ
R624	1	1	1	1	1	GD05102140	1KΩ
R625	1	1	1	1	1	GD05822140	8.2KΩ
R626	1	1	1	1	1	GD05822140	8.2KΩ
R627	1	1	1	1	1	GD05104140	100KΩ
R628	1	1	1	1	1	GD05104140	100KΩ
R629	1	1	1	1	1	GD05102140	1KΩ
R630	1	1	1	1	1	GD05102140	1KΩ
R631	1	1	1	1	1	GD05101140	100Ω
R632	1	1	1	1	1	GD05101140	100Ω
R633	1	1	1	1	1	GD05151140	150Ω
R634	1	1	1	1	1	GD05151140	150Ω
R635	1	1	1	1	1	GD05104140	100KΩ
R636	1	1	1	1	1	GD05104140	100KΩ
R637	1	1	1	1	1	GA05681010	680Ω 1W
R638	1	1	1	1	1	GA05681010	680Ω 1W
R639	1	1	1	1	1	RA01020110	1KΩ, Trimming
R640	1	1	1	1	1	RA01020110	1KΩ, Trimming
R641	1	1	1	1	1	GD05123140	12KΩ
R642	1	1	1	1	1	GD05123140	12KΩ
R643	1	1	1	1	1	GD05330140	33Ω
R653	1	1	1	1	1	GD05561140	560Ω
R654	1	1	1	1	1	GD05561140	560Ω
R655	1	1	1	1	1	GD05561140	560Ω
R656	1	1	1	1	1	GD05561140	560Ω
R661	1	1	1	1	1	GD05224140	220KΩ
R662	1	1	1	1	1	GD05224140	220KΩ
R663	1	1	1	1	1	GD05102140	1KΩ
R664	1	1	1	1	1	GD05102140	1KΩ
R665	1	1	1	1	1	GD05102140	1KΩ
R666	1	1	1	1	1	GD05102140	1KΩ
RE01	1	1	1	1	1	GD05183140	18KΩ
RE02	1	1	1	1	1	GD05183140	18KΩ
RE03	1	1	1	1	1	GD05103140	10KΩ
RE04	1	1	1	1	1	GD05103140	10KΩ
RE05	1	1	1	1	1	GD05102140	1KΩ
RE06	1	1	1	1	1	GD05102140	1KΩ
RE07	1	1	1	1	1	GD05223140	22KΩ
RE08	1	1	1	1	1	GD05223140	22KΩ
RE09	1	1	1	1	1	GD05153140	15KΩ
RE10	1	1	1	1	1	GD05153140	15KΩ

- (U): for U.S.A.
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REF. DESIG.	Q'TY U	C	N	A	P	PART NO.	DESCRIPTION
RE13	1	1	1	1	1	GD05223140	22KΩ
RE14	1	1	1	1	1	GD05223140	22KΩ
RE15	1	1	1	1	1	GD05104140	100KΩ
RE16	1	1	1	1	1	GD05104140	100KΩ
RE17	1	1	1	1	1	GD05394140	390KΩ
RE18	1	1	1	1	1	GD05394140	390KΩ
RE19	1	1	1	1	1	GD05104140	100KΩ
RE20	1	1	1	1	1	GD05104140	100KΩ
RE21	1	1	1	1	1	GD05102140	1KΩ
RE22	1	1	1	1	1	GD05102140	1KΩ
RE23	1	1	1	1	1	GD05104140	100KΩ
RE24	1	1	1	1	1	GD05104140	100KΩ
RJ01	1	1	1	1	1	GD05100140	10Ω
RJ02	1	1	1	1	1	GD05100140	10Ω
RJ03	1	1	1	1	1	GA05151020	150Ω 2W
RJ05	1	1	1	1	1	GD05224140	220KΩ
RJ06	1	1	1	1	1	GD05224140	220KΩ
RJ07	1	1	1	1	1	GD05683140	68KΩ
RJ08	1	1	1	1	1	GD05683140	68KΩ
RJ09	1	1	1	1	1	GD05104140	100KΩ
RJ10	1	1	1	1	1	GD05104140	100KΩ
RJ11	1	1	1	1	1	GD05822140	8.2KΩ
RJ12	1	1	1	1	1	GD05822140	8.2KΩ
RJ13	1	1	1	1	1	GD05562140	5.6KΩ
RJ14	1	1	1	1	1	GD05562140	5.6KΩ
RJ15	1	1	1	1	1	GD05273140	27KΩ
RJ16	1	1	1	1	1	GD05273140	27KΩ
RJ17	1	1	1	1	1	GD05470140	47Ω
RJ18	1	1	1	1	1	GD05470140	47Ω
RJ19	1	1	1	1	1	GD05152140	1.5KΩ
RJ20	1	1	1	1	1	GD05152140	1.5KΩ
RJ21	1	1	1	1	1	GD05392140	3.9KΩ
RJ22	1	1	1	1	1	GD05392140	3.9KΩ
RJ23	1	1	1	1	1	GD05102140	1KΩ
RJ24	1	1	1	1	1	GD05102140	1KΩ
RJ25	1	1	1	1	1	RA05020300	5KΩ, Trimming
RJ26	1	1	1	1	1	RA05020300	5KΩ, Trimming
RJ27	1	1	1	1	1	GD05394140	390KΩ
RJ28	1	1	1	1	1	GD05394140	390KΩ
RJ29	1	1	1	1	1	GD05822140	8.2KΩ
RJ30	1	1	1	1	1	GD05822140	8.2KΩ
RJ31	1	1	1	1	1	GD05682140	6.8KΩ
RJ32	1	1	1	1	1	GD05682140	6.8KΩ
RJ35	1	1	1	1	1	RA05030280	50KΩ, Trimming
RJ36	1	1	1	1	1	RA05030280	50KΩ, Trimming
RJ37	1	1	1	1	1	GD05104140	100KΩ
RJ38	1	1	1	1	1	GD05104140	100KΩ
RJ39	1	1	1	1	1	GD05104140	100KΩ
RJ40	1	1	1	1	1	GD05104140	100KΩ
⚠RJ41	1	1	1	1	1	GA05102010	1KΩ 1W
⚠RJ42	1	1	1	1	1	GA05102010	1KΩ 1W
RJ43	1	1	1	1	1	GD05104140	100KΩ

REF. DESIG.	Q'TY U	C	N	A	P	PART NO.	DESCRIPTION
RJ44	1	1	1	1	1	GD05104140	100KΩ
RJ45	1	1	1	1	1	GD05334140	330KΩ
RJ46	1	1	1	1	1	GD05334140	330KΩ
RJ47	1	1	1	1	1	GD05101140	100Ω
RJ48	1	1	1	1	1	GD05101140	100Ω
RJ82	1	1	1	1	1	GD05153140	15KΩ
RJ83	1	1	1	1	1	GD05224140	220KΩ
RJ84	1	1	1	1	1	GD05183140	18KΩ
RJ85	1	1	1	1	1	GD05562140	5.6KΩ
RJ86	1	1	1	1	1	GD05562140	5.6KΩ
RJ87	1	1	1	1	1	GD05183140	18KΩ
RJ88	1	1	1	1	1	GD05152140	1.5KΩ
RJ89	1	1	1	1	1	GD05152140	1.5KΩ
RL01	1	1	1	1	1	RA02030170	20KΩ, Trimming
RL02	1	1	1	1	1	RA02030170	20KΩ, Trimming
RL03	1	1	1	1	1	GD05103140	10KΩ
RL04	1	1	1	1	1	GD05103140	10KΩ
RL05	1	1	1	1	1	GD05472140	4.7KΩ
RL06	1	1	1	1	1	GD05472140	4.7KΩ
RL07	1	1	1	1	1	GD05561140	560Ω
RL08	1	1	1	1	1	GD05561140	560Ω
RL09	1	1	1	1	1	GD05103140	10KΩ
RL10	1	1	1	1	1	GD05103140	10KΩ
RL11	1	1	1	1	1	GD05473140	47KΩ
RL12	1	1	1	1	1	GD05473140	47KΩ
RL13	1	1	1	1	1	GD05394140	390KΩ
RL14	1	1	1	1	1	GD05394140	390KΩ
RL15	1	1	1	1	1	GD05822140	8.2KΩ
RL16	1	1	1	1	1	GD05822140	8.2KΩ
RL17	1	1	1	1	1	GD05102140	1KΩ
RL18	1	1	1	1	1	GD05102140	1KΩ
RL19	1	1	1	1	1	GD05103140	10KΩ
RL20	1	1	1	1	1	GD05103140	10KΩ
RL21	1	1	1	1	1	GD05103140	10KΩ
RL22	1	1	1	1	1	GD05103140	10KΩ
RL23	1	1	1	1	1	GD05222140	2.2KΩ
RL24	1	1	1	1	1	GD05222140	2.2KΩ
RL27	1	1	1	1	1	GD05122140	1.2KΩ
RL28	1	1	1	1	1	GD05122140	1.2KΩ
RL29	1	1	1	1	1	GD05222140	2.2KΩ
RL30	1	1	1	1	1	GD05222140	2.2KΩ
RL31	1	1	1	1	1	GD05821140	820Ω
RL32	1	1	1	1	1	GD05821140	820Ω
RL33	1	1	1	1	1	GD05221140	220Ω
RL34	1	1	1	1	1	GD05221140	220Ω
RL55	1	1	1	1	1	GD05151140	150Ω
RL56	1	1	1	1	1	GD05151140	150Ω
RO01	1	1	1	1	1	RA05030290	50KΩ, Trimming
RO02	1	1	1	1	1	RA05030290	50KΩ, Trimming
RO03	1	1	1	1	1	RM01030200	10KΩ, Variable
RO05	1	1	1	1	1	GJ05222010	2.2KΩ 1W
RO06	1	1	1	1	1	GJ05222010	2.2KΩ 1W
RO07	1	1	1	1	1	GD05120140	12Ω
RO08	1	1	1	1	1	GD05120140	12Ω
RO09	1	1	1	1	1	GD05273140	27KΩ
RO10	1	1	1	1	1	GD05273140	27KΩ

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REF. DESIG.	Q'TY U	C	N	A	P	PART NO.	DESCRIPTION
RS01	1	1	1	1	1	GD05472140	4.7KΩ
RS02	1	1	1	1	1	GD05103140	10KΩ
RS03	1	1	1	1	1	GD05103140	10KΩ
RS04	1	1	1	1	1	GD05103140	10KΩ
RS05	1	1	1	1	1	GD05822140	8.2KΩ
RS06	1	1	1	1	1	GD05103140	10KΩ
RS07	1	1	1	1	1	GD05223140	22KΩ
RS12	1	1	1	1	1	GG05221120	220Ω ½W
RS13	1	1	1	1	1	GG05151120	150Ω ½W
RS14	1	1	1	1	1	GG05221120	220Ω ½W
RS15	1	1	1	1	1	GG05330120	33Ω ½W
RS16	1	1	1	1	1	GD05562140	5.6KΩ
							P101-SEMICONDUCTORS
Q601	1	1	1	1	1	HC10007270	IC NE645B
Q602	1	1	1	1	1	HC10007270	IC NE645B
Q603	1	1	1	1	1	HT326341S0	Transistor 2SC2634(S)
Q604	1	1	1	1	1	HT326341S0	Transistor 2SC2634(S)
Q605	1	1	1	1	1	HT326341S0	Transistor 2SC2634(S)
Q606	1	1	1	1	1	HT326341S0	Transistor 2SC2634(S)
Q609	1	1	1	1	1	HT326341T0	Transistor 2SC2634(T)
Q610	1	1	1	1	1	HT326341T0	Transistor 2SC2634(T)
Q611	1	1	1	1	1	HT326341S0	Transistor 2SC2634(S)
Q612	1	1	1	1	1	HT326341S0	Transistor 2SC2634(S)
Q615	1	1	1	1	1	HT326342A0	Transistor 2SC2634(S or R)
Q616	1	1	1	1	1	HT326342A0	Transistor 2SC2634(S or R)
Q621	1	1	1	1	1	HD20001210	Diode 1S2473C
Q622	1	1	1	1	1	HD20001210	Diode 1S2473C
Q625	1	1	1	1	1	HD10004020	Diode OA91
Q626	1	1	1	1	1	HD10004020	Diode OA91
Q627	1	1	1	1	1	HD10004020	Diode OA91
Q628	1	1	1	1	1	HD10004020	Diode OA91
QE01	1	1	1	1	1	HT326342A0	Transistor 2SC2634(S or R)
QE02	1	1	1	1	1	HT326342A0	Transistor 2SC2634(S or R)
QE03	1	1	1	1	1	HT326341S0	Transistor 2SC2634(S)
QE04	1	1	1	1	1	HT326341S0	Transistor 2SC2634(S)
QE05	1	1	1	1	1	HC10006090	IC NJM387
QE13	1	1	1	1	1	HD20001210	Diode 1S2473C
QE14	1	1	1	1	1	HD20001210	Diode 1S2473C
QJ01	1	1	1	1	1	HT107501F0	Transistor 2SA750(F)
QJ02	1	1	1	1	1	HT107501F0	Transistor 2SA750(F)
QJ03	1	1	1	1	1	HT326341S0	Transistor 2SC2634(S)
QJ04	1	1	1	1	1	HT326341S0	Transistor 2SC2634(S)
QJ05	1	1	1	1	1	HT326342A0	Transistor 2SC2634(S or R)
QJ06	1	1	1	1	1	HT326342A0	Transistor 2SC2634(S or R)
QJ07	1	1	1	1	1	HT326341S0	Transistor 2SC2634(S)
QJ08	1	1	1	1	1	HT326341S0	Transistor 2SC2634(S)
QJ09	1	1	1	1	1	HD20022100	Diode 10E1-FA
QJ81	1	1	1	1	1	HT326342A0	Transistor 2SC2634(S or R)
QJ82	1	1	1	1	1	HD20001210	Diode 1S24731
QJ83	1	1	1	1	1	HD20001210	Diode 1S24731
QL01	1	1	1	1	1	HT326341S0	Transistor 2SC2634(S)
QL02	1	1	1	1	1	HT326341S0	Transistor 2SC2634(S)
QL03	1	1	1	1	1	HT326341S0	Transistor 2SC2634(S)
QL04	1	1	1	1	1	HT326341S0	Transistor 2SC2634(S)
QO01	1	1	1	1	1	HT313841R0	Transistor 2SC1384(R)
QO02	1	1	1	1	1	HT313841R0	Transistor 2SC1384(R)

REF. DESIG.	Q'TY U	C	N	A	P	PART NO.	DESCRIPTION
QS01	1	1	1	1	1	HT326341S0	Transistor 2SC2634(S)
QS02	1	1	1	1	1	HT326341S0	Transistor 2SC2634(S)
QS03	1	1	1	1	1	HT107501F0	Transistor 2SA750(F)
QS04	1	1	1	1	1	HT326341S0	Transistor 2SC2634(S)
QS05	1	1	1	1	1	HD20001210	Diode 1S2473C
QS06	1	1	1	1	1	HD20001210	Diode 1S2473C
QS07	1	1	1	1	1	HD20001210	Diode 1S2473C
QS08	1	1	1	1	1	HD20001210	Diode 1S2473C
QS09	1	1	1	1	1	HD30033090	Zener WZ052
							P101-MISCELLANEOUS
JJ01	1	1	1	1	1	YJ01001450	Jack, Mic (L)
JJ02	1	1	1	1	1	YJ01001450	Jack, Mic (R)
JJ03	1	1	1	1	1	YT02040260	Terminal, RCA Pin
JJ04	1	1	1	1	1	YJ01001460	Jack, H.P. Output
L601	1	1	1	1	1	LS20015010	M.P.X. Coil
L602	1	1	1	1	1	LS20015010	M.P.X. Coil
LJ01	1	1	1	1	1	LY20120260	Relay
LL01	1	1	1	1	1	LC22260060	Choke Coil, 22mH
LL02	1	1	1	1	1	LC22260060	Choke Coil, 22mH
LL03	1	1	1	1	1	LC24750040	Choke Coil, 4.7mH
LL04	1	1	1	1	1	LC24750040	Choke Coil, 4.7mH
PJ01	1	1	1	1	1	YP06002420	Plug (6P)
PJ02	1	1	1	1	1	YP06002360	Plug (3P)
PJ03	1	1	1	1	1	YJ06002390	Jack (5P)
PJ05	1	1	1	1	1	YP06000390	Plug (9P)
PJ06	1	1	1	1	1	YP06000330	Plug (3P)
PX62	1	1	1	1	1	YU04240260	Jumper Lead (4P)
PX63	1	1	1	1	1	YU03160260	Jumper Lead (3P)
SJ01	1	1	1	1	1	SR06030040	Rotary Switch
SJ02	1	1	1	1	1	SP02010630	Push Switch
SJ03	1	1	1	1	1	SR04040210	Rotary Switch
TO01	1	1	1	1	1	TC10150030	OSC Transformer
							P102-RECORD VOLUME CIRCUIT BOARD
P102	1	1	1	1	1	YK113T1740	P.W. Board, Record Volume
	1	1	1	1	1	ZZ113T1740	P.W. Board Assembly
RE11	1	1	1	1	1	RD05030120	50KΩ, Variable
							P103-LED, DOLBY CIRCUIT BOARD
P103	1	1	1	1	1	YK113T1750	P.W. Board, LED, Dolby
	1	1	1	1	1	ZZ113T1750	P.W. Board Assembly
QJ21	1	1	1	1	1	HI10006320	LED, GL-9NG9
							P104-METER CIRCUIT BOARD
P104	1	1	1	1	1	YK113T1770	P.W. Board, Meter
	1	1	1	1	1	ZZ113T1770	P.W. Board Assembly
PX01	1	1	1	1	1	IM12110010	D.C. Meter, VU

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REF. DESIG.	Q'TY U	C	N	A	P	PART NO.	DESCRIPTION
							P801-POWER SUPPLY CIRCUIT BOARD
P801	1	1	1	1	1	YK113T1720	P.W. Board, Power Supply
	1	1				ZZ113T1720	P.W. Board Assembly
			1			ZZ113T8720	P.W. Board Assembly
				1		ZZ113T7720	P.W. Board Assembly
					1	ZZ113T6720	P.W. Board Assembly
							P801-CAPACITORS
C801	1	1	1	1	1	EA10803530	Elect 1000μF 35V
C802	1	1	1	1	1	EA22803530	Elect 2200μF 35V
C803	1	1	1	1	1	EA10802530	Elect 1000μF 25V
C804	1	1	1	1	1	EA22702530	Elect 220μF 25V
C805	1	1	1	1	1	EA47701030	Elect 470μF 10V
⚠C810	1	1				DK18103530	Ceramic 0.01μF 125V
⚠C810			1	1	1	DK18103840	Ceramic 0.01μF 400V
							P801-RESISTORS
R801	1	1	1	1	1	GG05022120	2.2Ω ±5% ½W
⚠R802	1	1	1	1	1	GA05681010	680Ω ±5% 1W
⚠R803	1	1	1	1	1	GA05102010	1KΩ ±5% 1W
⚠R805	1	1	1	1	1	GD05104140	100KΩ ±5% ¼W
R806	1	1	1	1	1	GD05682140	6.8KΩ ±5% ¼W
⚠R807	1	1	1	1	1	GA05181010	180Ω ±5% 1W
R808	1	1	1	1	1	GG05056120	5.6KΩ ±5% ½W
⚠R809	1	1	1	1	1	RF05033120	3.3Ω ±5% ½W, Fusible
⚠R810	1	1	1	1	1	RF05033120	3.3Ω ±5% ½W, Fusible
							P801-SEMICONDUCTORS
⚠Q801	1	1	1	1	1	HD20026080	Diode RB151-FA
Q802	1	1	1	1	1	HT403131E0	Transistor 2SD313(E)
Q803	1	1	1	1	1	HD30028090	Zener WZ162
Q804	1	1	1	1	1	HT326342A0	Transistor 2SC2634(S or R)
Q805	1	1	1	1	1	HD20022100	Diode 10E1-FA
Q806	1	1	1	1	1	HD30025090	Zener WZ150
Q807	1	1	1	1	1	HT403131E0	Transistor 2SD313(E)
Q808	1	1	1	1	1	HT326342A0	Transistor 2SC2634(S or R)
							P801-MISCELLANEOUS
J801	1	1				YL01010040	Terminal
J802	1	1				YL01010040	Terminal
⚠S801	1	1				SP01010420	Push Switch, Power
⚠S801			1	1	1	SP01010390	Push Switch, Power
⚠T801	1	1				TS15401320	Power Transformer
⚠T801			1		1	TS15401330	Power Transformer
⚠T801				1		TS15401350	Power Transformer

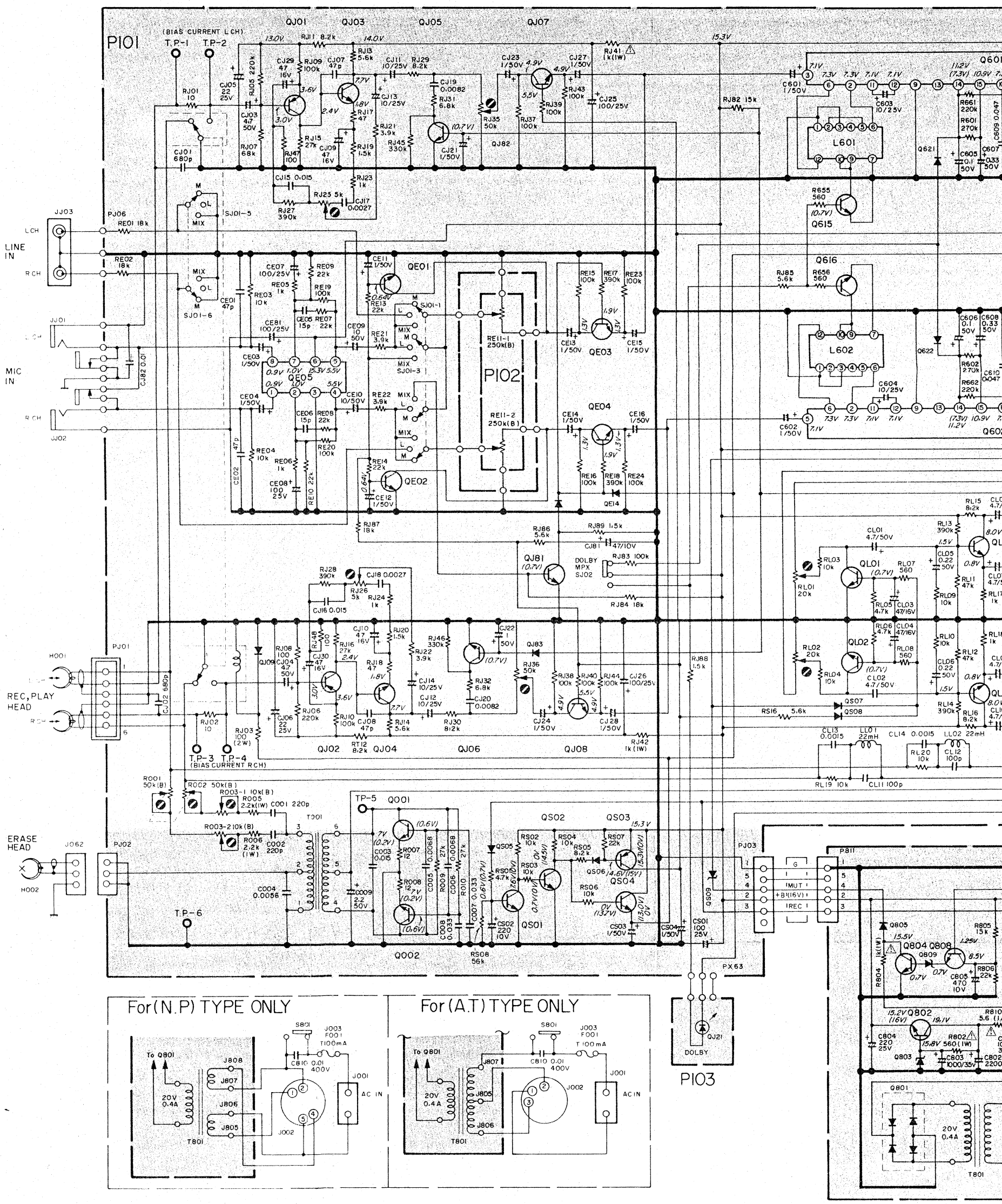
REF. DESIG.	Q'TY U	C	N	A	P	PART NO.	DESCRIPTION
							P802-MECHA CONTROL CIRCUIT BOARD
P802	1	1	1	1	1	YK113T1730	P.W. Board, Mecha Control
	1	1	1	1	1	ZZ113T1730	P.W. Board Assembly
							P802-CAPACITORS
CT01	1	1	1	1	1	EA47601030	Elect 47μF 10V
CT02	1	1	1	1	1	EA47701630	Elect 470μF 16V
CT03	1	1	1	1	1	EA47702530	Elect 470μF 25V
							P802-RESISTORS (All Resistors are ±5% & ¼W)
RT01	1	1	1	1	1	GD05102140	1KΩ
RT03	1	1	1	1	1	GD05332140	3.3KΩ
RT04	1	1	1	1	1	GD05103140	10KΩ
RT05	1	1	1	1	1	GD05223140	22KΩ
RT06	1	1	1	1	1	GD05104140	100KΩ
RT08	1	1	1	1	1	GD05681140	680Ω
RT09	1	1	1	1	1	GD05681140	680Ω
							P802-SEMICONDUCTORS
QT02	1	1	1	1	1	HT326341S0	Transistor 2SC2634(S)
							P802-MISCELLANEOUS
PT11	1	1	1	1	1	YP06002420	Plug (6P)
PT12	1	1	1	1	1	YU03180260	Jumper Lead (3P)
P051	1	1	1	1	1	YB00600170	Connective Cord
P052	1	1	1	1	1	YB00600180	Connective Cord
SJ06	1	1	1	1	1	SC01010330	Switch, Reed
							P803-LED, REC. CIRCUIT BOARD
P803	1	1	1	1	1	YK113T1760	P.W. Board, LED, Rec.
	1	1	1	1	1	ZZ113T1760	P.W. Board Assembly
QT06	1	1	1	1	1	HI10008320	LED GL-9PR2
QT07	1	1	1	1	1	HI10011320	LED GL-9PG2

(W01-99)	Assembly and Wiring
(T01-99)	Adjustment
(X01-00)	Correction

10. TECNICAL SPECIFICATIONS

Style	Slim type top load
Tape Drive System	Single Capstan Drive
Cartridge	Philips type compact cassette
Track System	Compatible Stereo 4-track 2-channel
Tape Speed	4.75 cm/sec.
Heads	2 Head System
Composition	Rec/Play: Super Hard Metal Alloy Erase: Dual gap Ferrite
Motor	1 Motor System Capstan: DC Servo Motor
Meters	VU Meter
Overall Frequency Response at –20 dB	
Ferric Oxide Tape	40 Hz ~ 12.5 kHz
CrO_2 Tape	40 Hz ~ 14 kHz
Fe-Cr Tape	40 Hz ~ 13 kHz
Metal Tape	40 Hz ~ 15 kHz
Signal-to-Noise Ratio:	
Dolby (ON)	55 dB
Dolby (OFF)	46 dB
Wow and Flutter	
DIN WTD	0.17%
Outputs	
Line Level/Impedance	500 mV/8.5 KΩ
Headphone Level/Impedance	50 mV/8Ω
Input (Level at 0 VU)	
Line Sensitivity/Impedance	50 mV/50 kΩ
Mic Sensitivity/Impedance	0.2 mV/10 kΩ
Fast Rewind Time	90 sec. (C-60)
Fast Forward Time	90 sec. (C-60)
AC Line Voltage	120 V AC, 60 Hz (U & C Version) 220 V AC, 50/60 Hz (N Version) 240 V AC, 50/60 Hz (A Version) (N and A versions are featuring the external voltage selector for use on other voltage.)
Power Consumption	16 W
Dimensions (W x H x D)	416 x 73 x 302 mm
Weight	5.5 kg

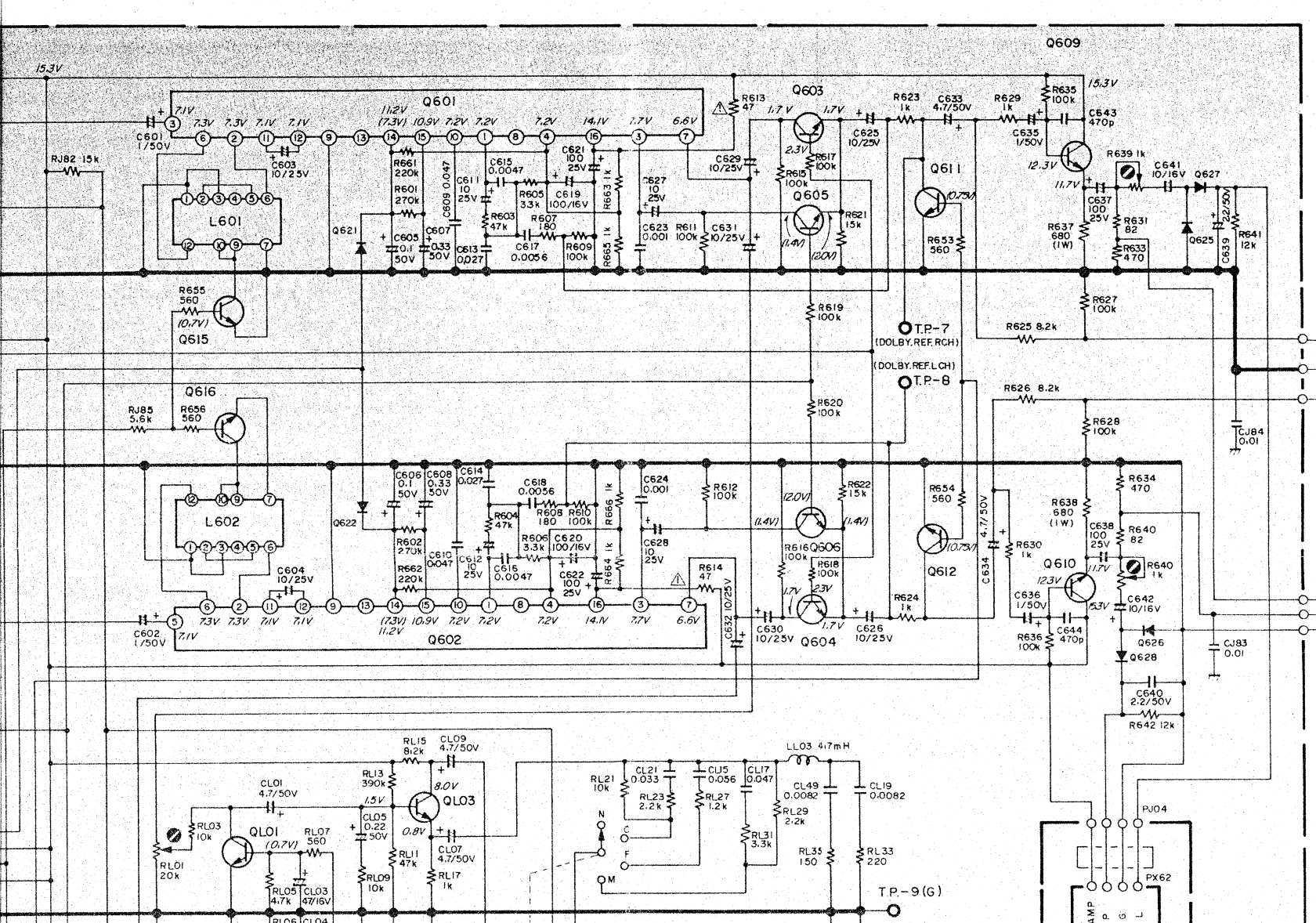
SCHEMATIC DIAGRAM

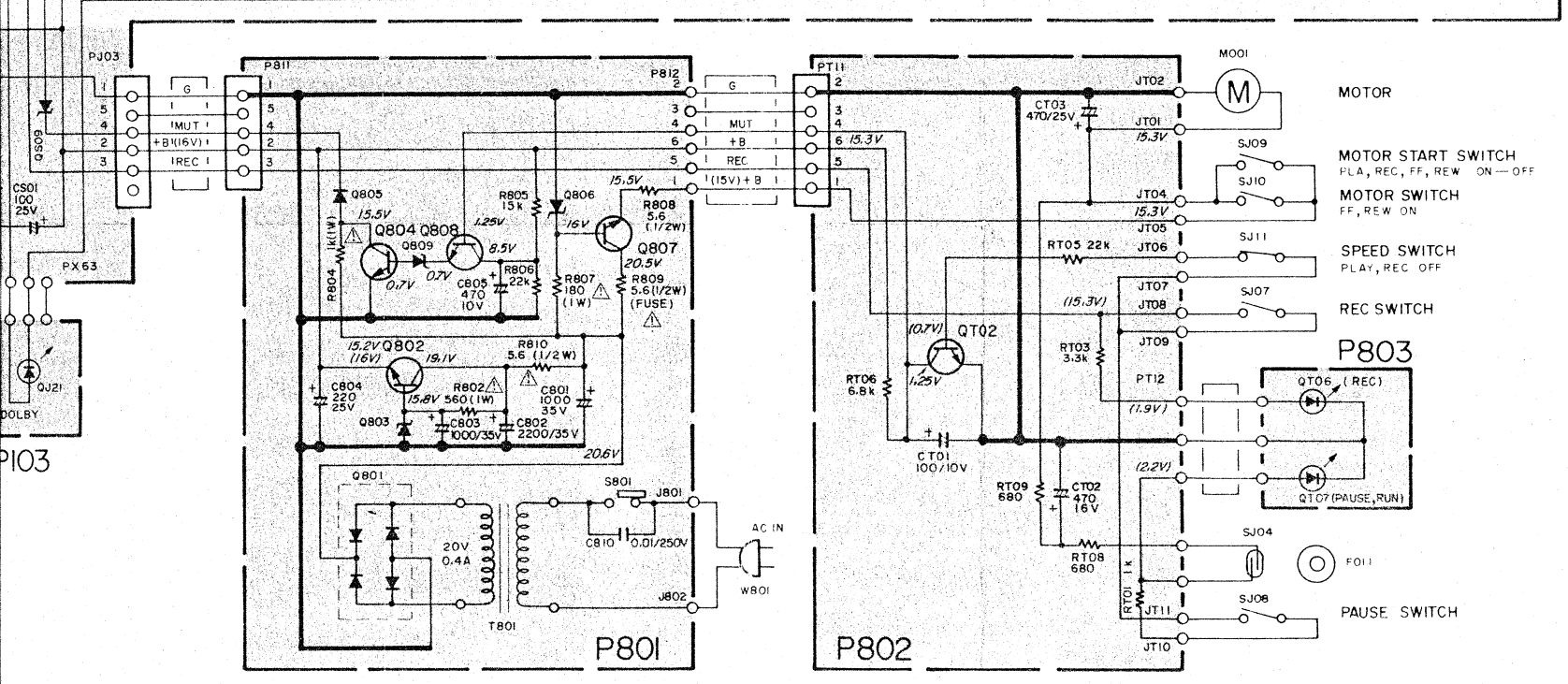


Note on safety: The parts marked with △ are important parts on the safety. Please use the parts having the designated parts number without fail.

Components and wiring are subject to change for modification

SD3510





IC

Q601, Q602
HCI0007270
NE645B

QE05
HCI0006090
NJM387

TRANSISTOR

Q001, Q002
HT3I3841RO
2SCI384(R)

Q609, Q610
HT326341TO
2SC2634(T)

Q802, Q807
HT403131EO
2SD313(E)

Q804, Q808, QE01, QE02, QJ05
QJ06, QJ81, Q615, Q616
HT326342AO
2SC2634(S or R)

QJ01, QJ02, QS03
HTI07501FO
2SA750(F)

QJ03, QJ04, QJ07, QJ08, QE03
QE04, Q603~Q606, Q611, Q612
QL01~QL04, Q801, QS02, QS04
HT326342AO
2SC2634(S)

DIODE

Q625~Q628
HDI0004020
0A91

Q803
HD30028090
WZ162

Q805
HD20022100
IOEI-FZ

Q806
HD30025090
WZ-150

Q809
HD30031090
WZ-081

QJ21
HII0006320
GL-9NG-9

QJ82, QJ83, QE13, QE14
QS05~QS08, Q621, Q622
HD20001210
IS2473C or IS1555

QS09
HD30033090
WZ-152

QT06
HII0008320
GL-9PR2

QT07
HII0011320
GL-9PG

nents and wiring are subject to change for modification without notice.